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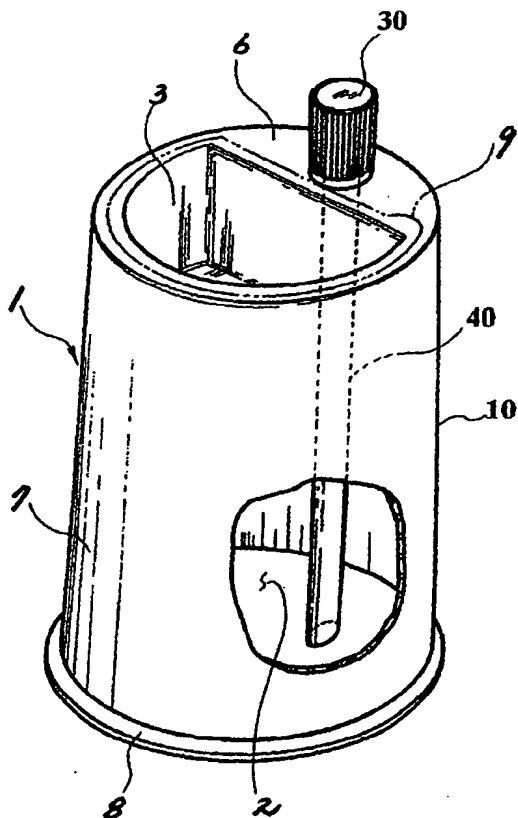
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(54) Title: CONTAINER FOR FOOD AND BEVERAGE



(57) Abstract: A food/beverage container comprising a main body having a main receiving cavity containing contents and a spouting portion for discharging the contents; and a sub-receiving cavity formed in the main receiving cavity to receive other foods. The main receiving cavity and the sub-receiving cavity are separated from each other.

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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## TITLE

CONTAINER FOR FOOD AND BEVERAGE

5

## TECHNICAL FIELD

The present invention relates to a container for food and beverage that has a main receiving cavity and a sub-receiving cavity that are separated from each other.

10 The present invention relates to a container for food and beverage, which is designed to allow a user to drink beverage through a spouting member or to dispense the beverage to other containers.

The present invention relates to a container having a sub-receiving cavity in which a snack can be stored.

## 15 BACKGROUND ART

As instant food and beverage have been developed, a variety of containers proper to the instant food and beverage have been developed.

A conventional container having a dual-cavity comprises a main  
20 container body and a sub-container body that is fitted on an upper

portion of the main container body. The main container body is for containing beverage and the sub-container body is for containing snack.

However, due to a seal problem, such a conventional container is used only for an instant food. That is, it cannot be used as a seal  
5 package for beverage and food. Furthermore, the conventional container is designed not to dispense the beverage to another containers.

Another conventional container comprises a first cup for storing beverage and a second cup inserted into the first cup to store snack. The  
10 second cup is provided with a spouting hole.

However, such a conventional container has also a seal problem. In addition, since the spouting hole is designed not to proper for the human body, it is inconvenient to drink the beverage stored in the main cup.

15 Therefore, there is a need for a container that can be used as a multi-purpose and can preserve the contents for a long time by improving the seal structure.

## SUMMARY OF THE INVENTION

20 Therefore, the present invention has made in an effort to solve

the above-described problems of the conventional art.

It is an objective of the present invention to provide a container for food and beverage that has a main cavity and a sub-cavity formed in the main cavity while providing a perfect seal to both of the cavities.

5 It is another objective of the present invention to provide a container that can allow a user to drink beverage through a spouting member or to dispense the drink to other containers.

To achieve the above object, the present invention provides a food/beverage container comprising a main body having a main  
10 receiving cavity containing contents and a spouting portion for discharging the contents; and a sub-receiving cavity formed in the main receiving cavity to receive other foods, wherein the main receiving cavity and the sub-receiving cavity are separated from each other.

The sub-receiving cavity is sealed by a seal member. The  
15 spouting portion is closed by a closer.

A spout member is installed in the spouting portion. The spouting portion is provided with an air intake hole.

The spouting portion has a straw insertion hole or a spouting hole. The spouting portion has a cutting film provided with a pulling handle  
20 with a cutting line.

The spouting portion includes a folding portion to be bent in a direction. The main body is increased in a diameter as it goes downward.

A bottom of the main body is sealed by a seal member. The main  
5 body receives a sub-container body coupled on a top of the main body,  
the sub-container body defining the sub-receiving cavity and provided  
with the spouting portion.

The seal member is designed to reseal. The spouting portion  
includes an operating spouting member slidably inserted in the spouting  
10 portion.

The spouting member includes a sub-spouting member. The  
spouting portion is capable of bending into the sub-receiving cavity.

The sub-container body is tightly coupled to the main body  
through an insert forming process, a supersonic wave bonding process,  
15 a press forming process, or a screw-coupling process.

The main body is a metal can, a paper pack, or a pouch. The  
sub-container body is provided with a cutting film with a cutting line and  
a pulling handle coupled on the cutting film.

The sub-container body is provided with a cutting hole and a  
20 closer for closing the cutting hole. A paper filter is received in the

sub-receiving cavity of the sub-container body.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a partially broken perspective view of a food/beverage  
5 container according to an embodiment of the present invention;

Figs. 2 through 4 are perspective views of a variety of  
embodiments of spouting portions of the present invention;

Fig. 5 is a perspective view of another embodiment of the present  
invention;

10 Figs. 6 and 7 a perspective view of a using state of Fig. 5;

Fig. 8 is a sectional view of another embodiment of the present  
invention;

Figs. 9 through 11 are sectional views of a using state of Fig. 8;

Figs. 12 through 15 are perspective views of a coupling structure  
15 of a sub-container of the present invention;

Figs. 16 through 18 are sectional views of another coupling  
structure of a sub-container of the present invention;

Figs. 19 through 20 are perspective views of a main body  
according to another embodiment of the present invention;

20 Figs. 21 through 25 are sectional views of another embodiment of

a spouting portion of the present invention;

Figs. 26 and 27 are perspective views of another embodiment of a spouting portion of the present invention;

Figs. 28 through 31 are sectional views of a sub-receiving cavity  
5 of the present invention.

### BEST MODE FOR CARRYING OUT THE INVENTION

Preferred embodiments of the present invention will be described more in detail hereinafter in conjunction with the  
10 accompanying drawings.

As shown in Fig. 1, a food/beverage container 1 of the present invention comprises a main receiving cavity 2 for containing liquid material and a main body 10 defining the main receiving cavity 2 and provided with a spouting portion for spouting the liquid material. The  
15 main body 10 includes a sub-receiving cavity 3 defined by a top concaved into the main receiving cavity 2.

The main receiving cavity 2 is separated from the sub-receiving cavity 3.

A closer 30 is coupled on the spouting portion formed beside the  
20 sub-receiving cavity 3. A spouting member 40 is installed through the

spouting portion.

The main body 10 includes a top portion 6 and a side portion 7.

A circumferential flange 8 is formed on a lower end of the side portion 7.

Liquid material is fed through a lower end of the main body 10.

5 A seal member (not shown) is attached on the circumferential flange 8 to provide a seal to the main body 10.

In use, the closer 30 is opened so that a user can suck the spouting member 40 to drink the liquid material.

In the sub-receiving cavity 3, snack can be stored. Therefore,  
10 after removing a seal member, the user can eat the snack while drinking the liquid material.

Since the main body 10 is designed having a wide-top and a narrow-bottom, many main bodies can be stacked one another for the delivery.

15 The liquid material can be filled in the main body through the spouting portion in a state where the bottom is sealed and the closer is opened.

In another embodiment, as shown in Fig. 2, the top 6 of the main body 10 is provided with a plurality of straw insertion holes 13. In  
20 another embodiment, as shown in Fig. 3, a spouting hole may be formed

on the top so that the user can selectively use the straw through the spouting hole.

As shown in Fig. 4, the top of the main body is provided with a thin layer 12 through which the straw can penetrate. The thin layer 12  
5 may be provided with a cutting line.

As shown in Fig. 5, the spouting portion is formed in the sub-receiving cavity 3. The spouting portion is formed of a cutting layer integrated with a pulling handle 17.

As shown in Fig. 6, snack is filled in the sub-receiving cavity 3  
10 and the seal member 9 is attached on a top of the sub-receiving cavity 3. In use, after removing the seal member 9, the cutting layer 15 is removed by pulling the pulling handle 17. A straw is inserted into a hole defined by removing the cutting layer 15.

Fig. 8 shows another embodiment of the present invention.

15 As shown in the drawing, the food/beverage container 1 of this embodiment includes a main body 10 provided with a main receiving cavity 11. a sub-container body 20 is associated with a top of the main body 10. That is, the main body 10 is provided with a coupling circumferential flange 12 at its top.

20 The sub-container body 20 is provided with a circumferential

flange 21 corresponding to the circumferential flange of the main body  
10. The sub-container body 20 is provided with a sub-receiving cavity  
22 and a spouting portion 23 is formed beside the sub-receiving cavity  
22. The spouting portion 23 is provided with a folding portion so that  
5 the spouting portion 23 can be bent toward the sub-receiving cavity 22  
based on a connecting portion 25 between the spouting portion and the  
top portion 24.

The spouting portion 23 is closed by a closer 30 through a screw  
or fitting manners.

10 A spouting member 40 is assembled through the spouting portion  
23 to discharge the content in the main receiving cavity 11 of the main  
body 10. The spouting member 40 includes an operation part 41  
corresponding to an insertion hole of the spouting portion 23. The  
operation part 41 is provided at a lower end with a circumferential  
15 projection 42 and a side through hole 41 formed above the  
circumferential projection 42. Another circumferential projection 45 is  
also formed on an upper portion of the operation part 41. The  
circumferential projection 42 can be formed as a folding portion 43.

The operation of the above-described present invention will be  
20 described hereinafter.

Liquid material is filled in the main receiving cavity 11 of the main body 10 and the sub-container body 20 having the spouting portion 23 closed by the closer 30 is associated with the main body 10.

Snack is filled in the sub-receiving cavity 22 of the sub-container body 20, and is sealed by the seal member 50 such as an aluminum film.

Before the seal using the seal member 50, the spouting portion 23 is bent into the sub-receiving cavity 22.

In use, after removing the seal member 50, the spouting portion 23 is elected (see Fig. 9). To drink the liquid material in the main receiving cavity 11, the closer 30 is opened (see Fig. 10). When the user sucks the spouting member 40, the liquid material is spouted through the spout member 40.

Here, the side through hole 44 is closed by the insertion hole wall of the spouting portion 23, the liquid material can be spouted through the spout member 40. An air intake passage may be formed on an outer wall of the spouting member 40 to prevent the formation of vacuum during drinking the liquid material.

In order to dispense the liquid material to another container, the spout member 40 is pushed down as shown in Fig. 11 to open the side

through hole of the spout member 40.

In this state, when the container 1 is inclined or upside-down, the liquid material can be spouted through the side through hole 44 and the spout hole 43.

5        In a state shown in Fig. 10, the snack contained in the sub-receiving cavity 22 may drop. However, this can be prevented by a variety of method. For example, the sub-receiving cavity 22 may be designed to be reclosed or a sub-closing container 60 may be provided.

As described above, the container 1 is designed to drink  
10    beverage while eating snack.

In another embodiment of the present invention, as shown in Fig. 12, a sub-container body 920 is integrated with a main body 910 through an insert forming process.

Fig. 13 shows a food/beverage container 1 having a main body  
15    1010 and a sub-container body 1020 that are integrally formed through, for example, a direct blow or an injection blow. This has an advantage of reducing the costs.

Fig. 14 shows a food/beverage container 1 formed in a polygonal shape. The main body 1110 and the sub-container body  
20    1120 are formed in a square shape.

Fig. 15 shows a container 1 having a sub-container body 1220 having a fitting portion 1228 fitted on a flexible pouch.

Fig. 16 shows a container having a sub-container body 1420 coupled on a main body 1410 in a one-touch opening method. That is, 5 circumferential projections 1412 and 1412' are formed on a top of the main body 1410 and the sub-container body 1420 is provided with coupling portions 1421 and 1421' that are fixed on the circumferential projections 1412 and 1412'.

Fig. 17 shows a sub-container body 1520 that is screw-coupled 10 on a main body 1510. That is, a thread is formed on an upper end of the main body 1510, and the sub-container body 1520 is also provided with a thread coupled with the thread 1513 of the main body 1510.

Fig. 18 shows a container in which a sub-container body 1620 functions as a seal member by coupling on a top of a main body 1610. 15 That is, a circumferential step 1612 is formed on a top of the main body 1610, and the sub-container body 1620 is provided with a circumferential projection interlocked with the circumferential step 1612 of the main body, thereby providing a seal to the main body.

Figs. 19 and 20 show a container having a main body 1810 and a 20 sub-container body 1820 coupled on an inner surface of the main body

1810 by a coupling portion 1821. The coupling portion 1821 is provided with a cutting line so that the sub-container body 1820 can be easily opened.

That is, a cutting line 1814 is formed around a folding line 1813  
5 and a sub-cutting line 1815 for cutting the cutting line 1813 and reclosing the sub-receiving cavity 22 is also formed. A guiding portion 1816 formed of a thin film is also provided to cut the sub-cutting line 1815.

In use, when the guide portion 1816 is pulled toward a portion  
10 where the sub-cutting line 1815 is formed, the sub-cutting line 1815 and the cutting line 1814 are cut to remove a portion of the main body 1810.

In this state, when further pulling the remained portion, the cutting line 1814 is cut to open the sub-receiving cavity 22. As shown  
15 in Fig. 20, the cut portion can be used to reclose the sub-receiving cavity 22 after the closer 30 is elected.

In another embodiment, as shown in Fig. 21, there is provided a spouting portion 23 provided with a spouting hole 2128. An air intake hole 2129 is provided on a wall defining the spouting hole 2128. In use,  
20 when the container 1 is inclined, the liquid contents in the main container

2110 is spouted and air is introduced into the main container 2110 through the air intake hole 2129 to allow the liquid content can be effectively spouted.

Fig. 22 shows an operating spouting member 2340 that is vertical movable in the spouting portion 23. In use, the operating spouting member 2340 can be projected outward, making it easy for a user to easily drink the content.

Fig. 23 shows a spouting portion 23 provided with a spouting hole 2528 through which the content can be spouted.

Fig. 24 shows a spouting portion 23 separated from a sub-receiving cavity 2622 by a separating wall 2670 for reason of sanitation.

Fig. 25 shows a spouting member 2840 that is designed to rotate at a predetermined angle by a coupling projection 2841 at a side portion of a sub-receiving cavity 22. The spouting member 2840 is provided with a longitudinal spout hole 2842 and a fixing portion 2843 with the coupling projection 2841 is provided with a seal projection for sealing an upper hole of a straw assembling part 2844.

An air intake hole 2845 is formed near the straw assembling part 2844. The spouting member 2840 is provided with a seal projection

2846 closing the air intake hole 2845.

In use, when the spouting member 2840 is elected based on the coupling projection 2841, the upper hole of the straw assembly part 2844 and the air intake hole 2845 are opened.

5 In this state, when sucking the spout member 2840, since the spout hole 2842 communicates with the straw 2847, the content in the main body 2810 is discharged. At this point, external air is introduced into the main body 2810 through the air intake hole 2845.

Fig. 26 shows a spouting portion provided with a spout hole. An upper end of the spout hole is closed by a cutting film 2925 having a cutting line 2924. The cutting film 2925 is provided with a pulling handle 2926 to easily cut the cutting line 2924.

In use, when the pulling handle 2926 is pulled, the cutting film 2925 is removed while the cutting line 2924 is cut, thereby opening the spouting hole.

Fig. 27 shows a spouting portion provided with a spout hole and/or an air intake hole. A seal film 3024 closes an upper end of the spout hole.

Figs. 28 and 29 shows a sub-receiving cavity 3122 having other function rather than a function for containing snack.

The sub-receiving cavity 3122 is provided at its lower portion with a cutting film 3124 having a cutting line 3123. A pulling handle 3125 is formed on the cutting film 3124. A plurality of projections 3127 are formed on a bottom of the sub-receiving cavity 3122 toward a cutting hole 3126 formed by removing the cutting film 3124.

The projections 3127 function to guide fluid to effectively flow regardless of materials contained in the sub-receiving cavity 3122.

By the projections 3127, a coffee dripping is possible in a state where the cutting film 3124 is removed by pulling the pulling handle 3125. That is, a paper filter 3100 containing ground coffee is disposed in the sub-receiving cavity 3122 and water is applied to the paper filter 3100. At this point, since a fluid flowing space is defined between the bottom of the sub-receiving cavity 3122 and the paper filter 3100 by the projections, the water containing coffee components can effectively flow into the main container through the cutting hole 3126.

The height C of the projections 3127 is properly adjusted according to a volume of the sub-receiving cavity 3122.

Fig. 30 shows that a cutting hole formed on a bottom of a sub-receiving cavity 3122 is closed by a closer 3300 to prevent the contents in the main body from flowing out through the cutting hole

when the container is inclined.

Fig. 31 shows that a sub-receiving cavity 3422 is sealed by a seal member 3450 that is capable of reseal the sub-receiving cavity 3422.

#### INDUSTRIAL APPLICABILITY

5           As described above, the present invention provides a container for food and beverage that has a main receiving cavity and a sub-receiving cavity that are separated from each other.

          The present invention further provides a container for food and beverage, which is designed to allow a user to drink beverage through a  
10   spouting member or to dispense the beverage to other containers.

## CLAIMS

1. A food/beverage container comprising:  
a main body having a main receiving cavity containing contents  
and a spouting portion for discharging the contents; and  
5 a sub-receiving cavity formed in the main receiving cavity to  
receive other foods,  
wherein the main receiving cavity and the sub-receiving cavity  
are separated from each other.
2. The food/beverage container of claim 1 wherein the  
10 sub-receiving cavity is sealed by a seal member.
3. The food/beverage container of claim 1 wherein the spouting  
portion is closed by a closer.
4. The food/beverage container of claim 1 wherein a spout  
member is installed in the spouting portion.
- 15 5. The food/beverage container of claim 1 wherein the spouting  
portion is provided with an air intake hole.
6. The food/beverage container of claim 1 wherein the spouting  
portion has a straw insertion hole or a spouting hole.
7. The food/beverage container of claim 1 wherein the spouting  
20 portion has a cutting film provided with a pulling handle with a cutting

line.

8. The food/beverage container of claim 1 wherein the spouting portion includes a folding portion to be bent in a direction.

9. The food/beverage container of claim 1 wherein the main body  
5 is increased in a diameter as it goes downward.

10. The food/beverage container of claim 1 wherein a bottom of the main body is sealed by a seal member.

11. The food/beverage container of claim 1 wherein the main body receives a sub-container body coupled on a top of the main body,  
10 the sub-container body defining the sub-receiving cavity and provided with the spouting portion.

12. The food/beverage container of claim 2 wherein the seal member is designed to reseal.

13. The food/beverage container of claim 4 wherein the spouting  
15 portion includes an operating spouting member slidably inserted in the spouting portion.

14. The food/beverage container of claim 4 wherein the spouting member includes a sub-spouting member.

15. The food/beverage container of claim 8 wherein the spouting  
20 portion is capable of bending into the sub-receiving cavity.

16. The food/beverage container of claim 11 wherein the sub-container body is tightly coupled to the main body through an insert forming process, a supersonic wave bonding process, a press forming process, or a screw-coupling process.

5        17. The food/beverage container of claim 11 wherein the main body is a metal can, a paper pack, or a pouch.

18. The food/beverage container of claim 11 wherein the sub-container body is provided with a cutting film with a cutting line and a pulling handle coupled on the cutting film.

10        19. The food/beverage container of claim 11 wherein the sub-container body is provided with a cutting hole and a closer for closing the cutting hole.

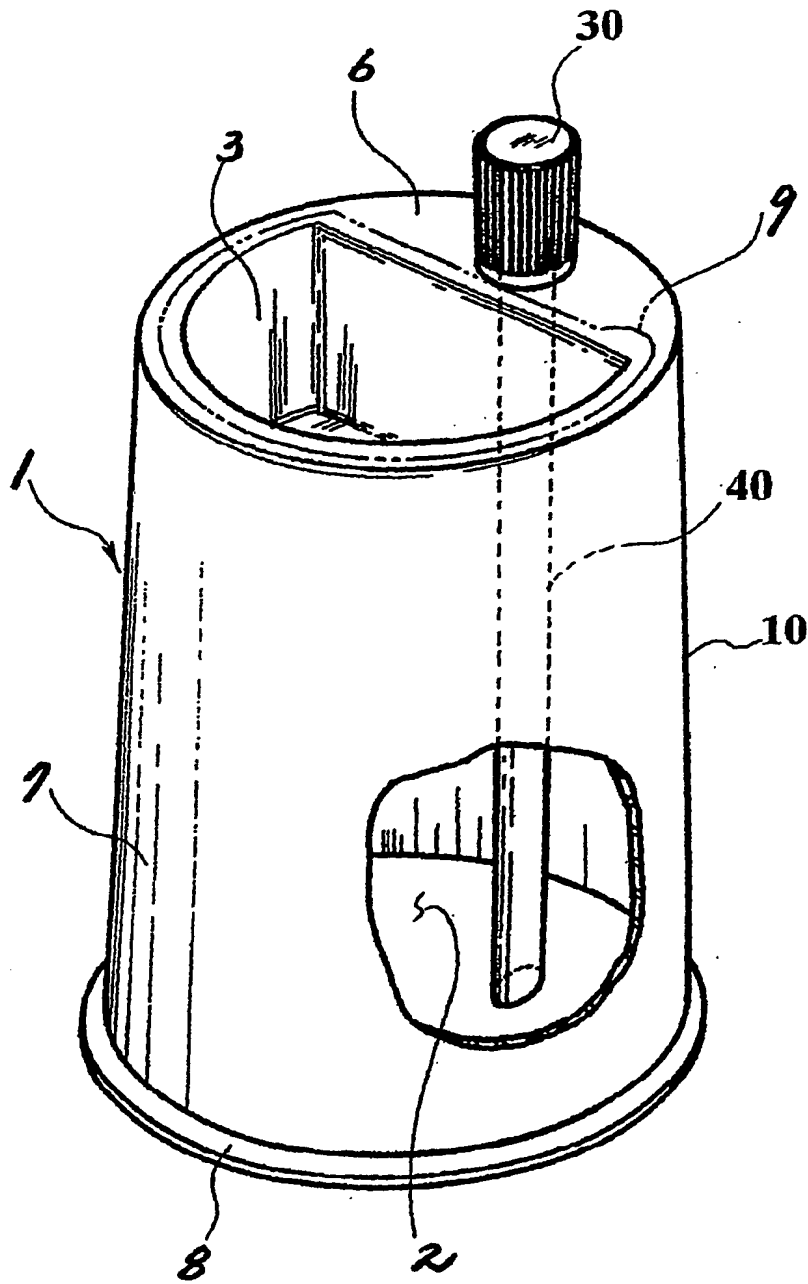
20. The food/beverage container of any one of claims 18 and 19 wherein a paper filter is received in the sub-receiving cavity of the  
15    sub-container body.

## **ABSTRACT**

A food/beverage container comprising a main body having a main receiving cavity containing contents and a spouting portion for discharging the contents; and a sub-receiving cavity formed in the main receiving cavity to receive other foods. The main receiving cavity and the sub-receiving cavity are separated from each other.

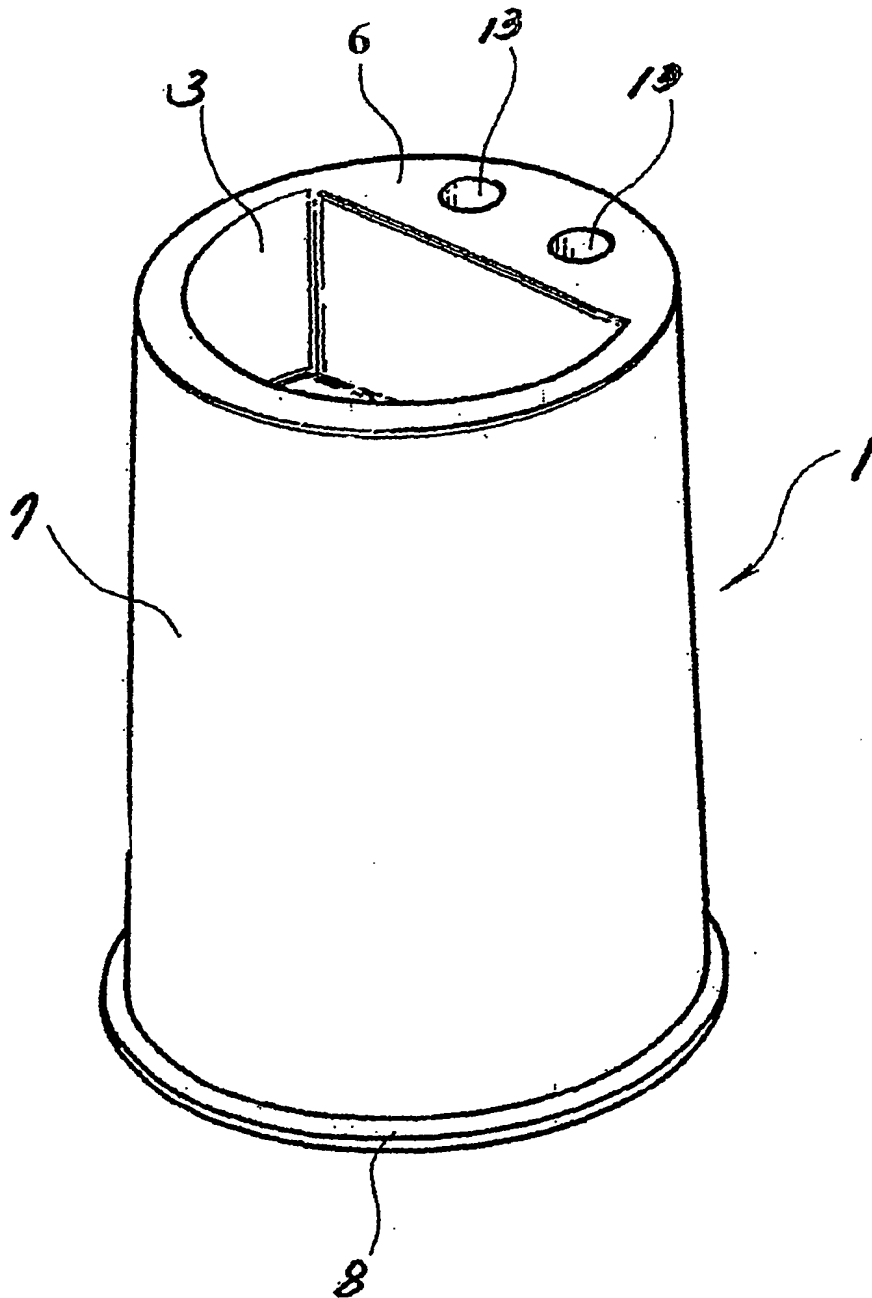
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【FIG 1】



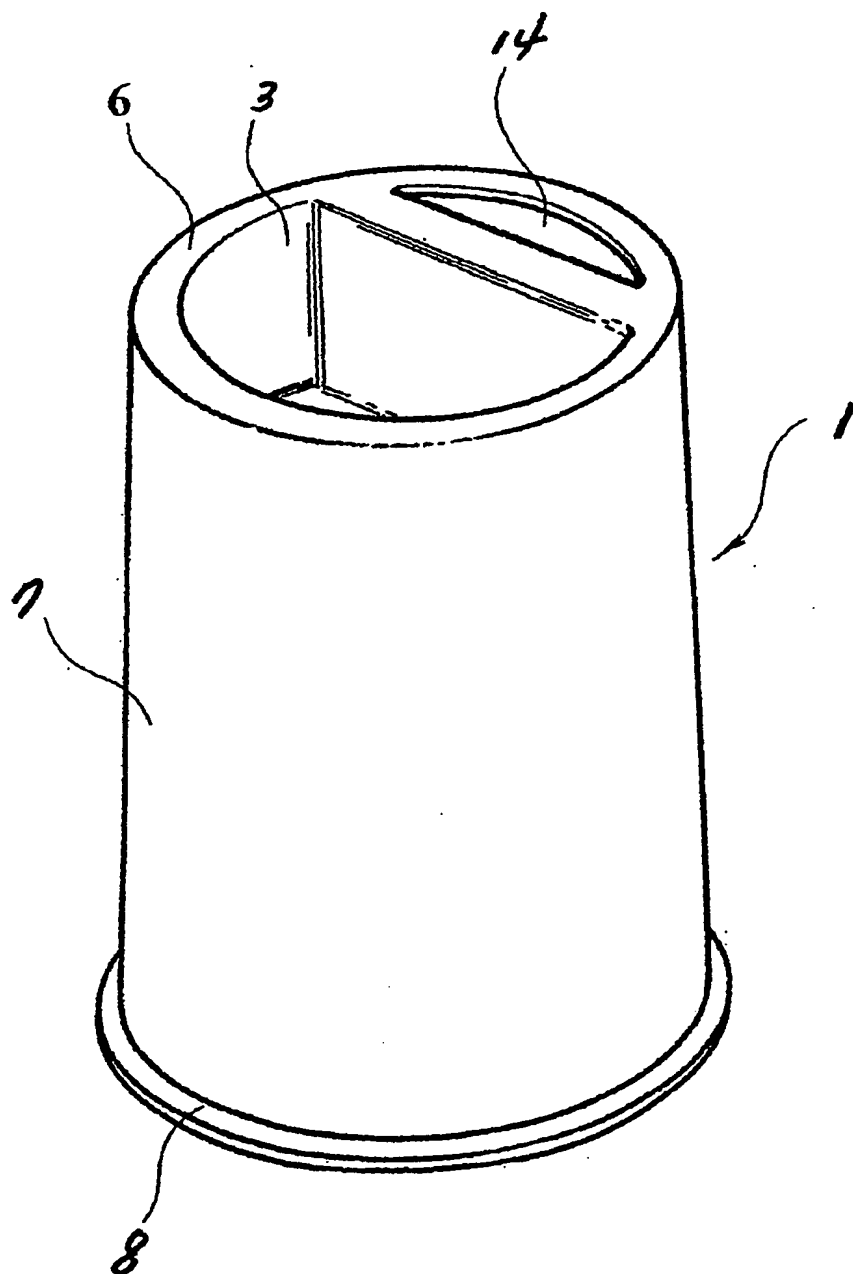
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【FIG 2】



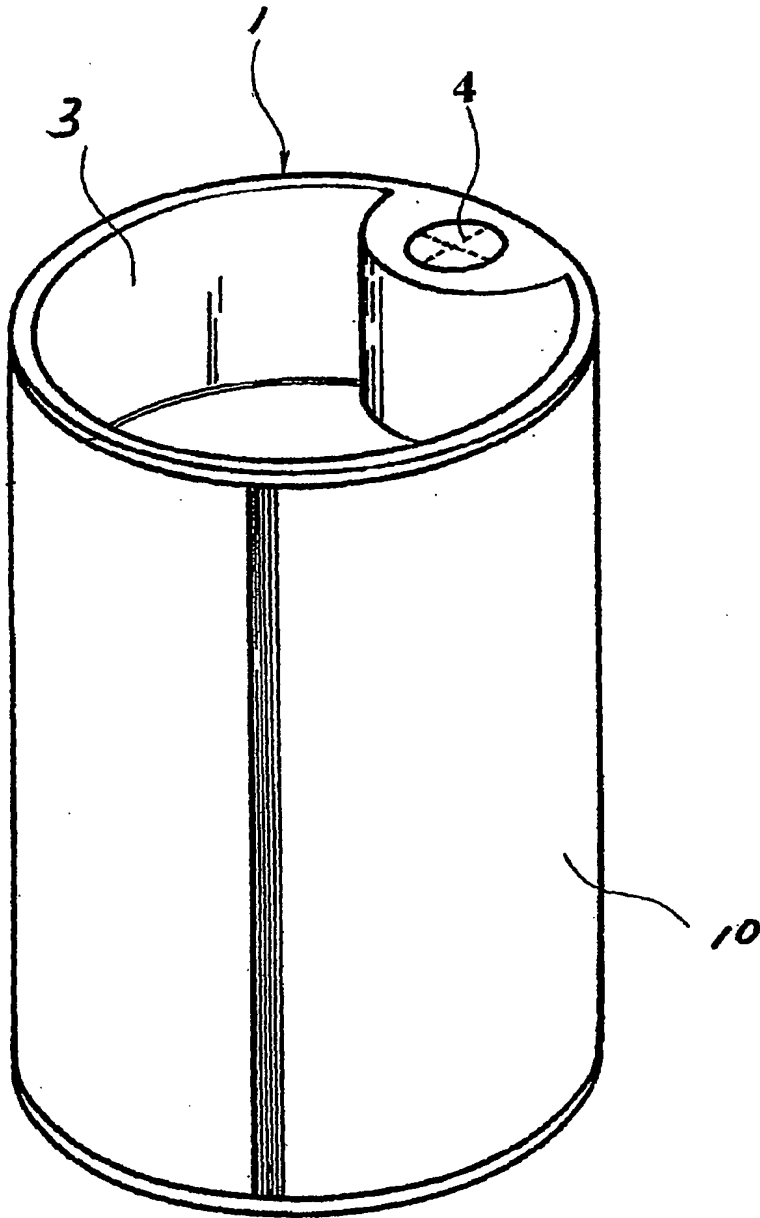
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【FIG 3】



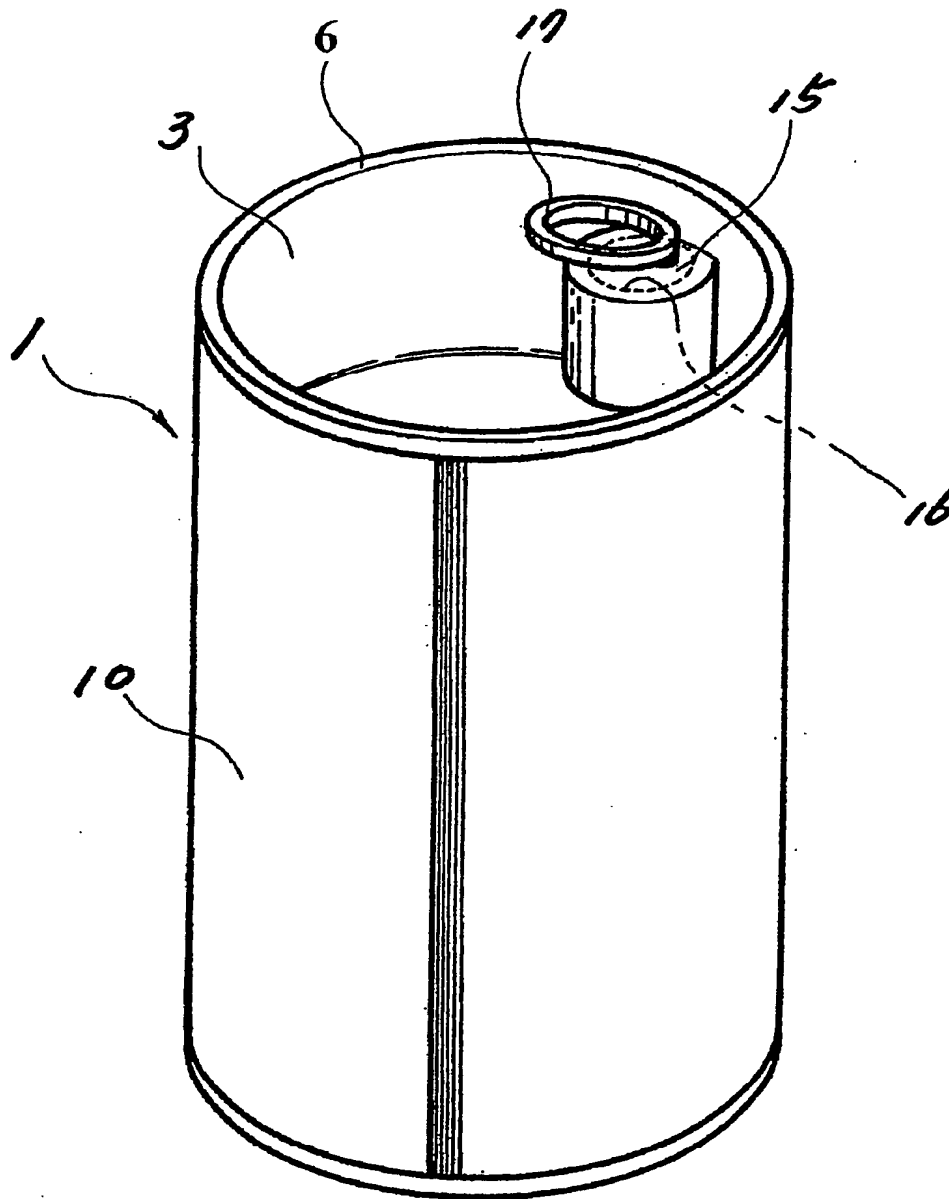
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【FIG 4】



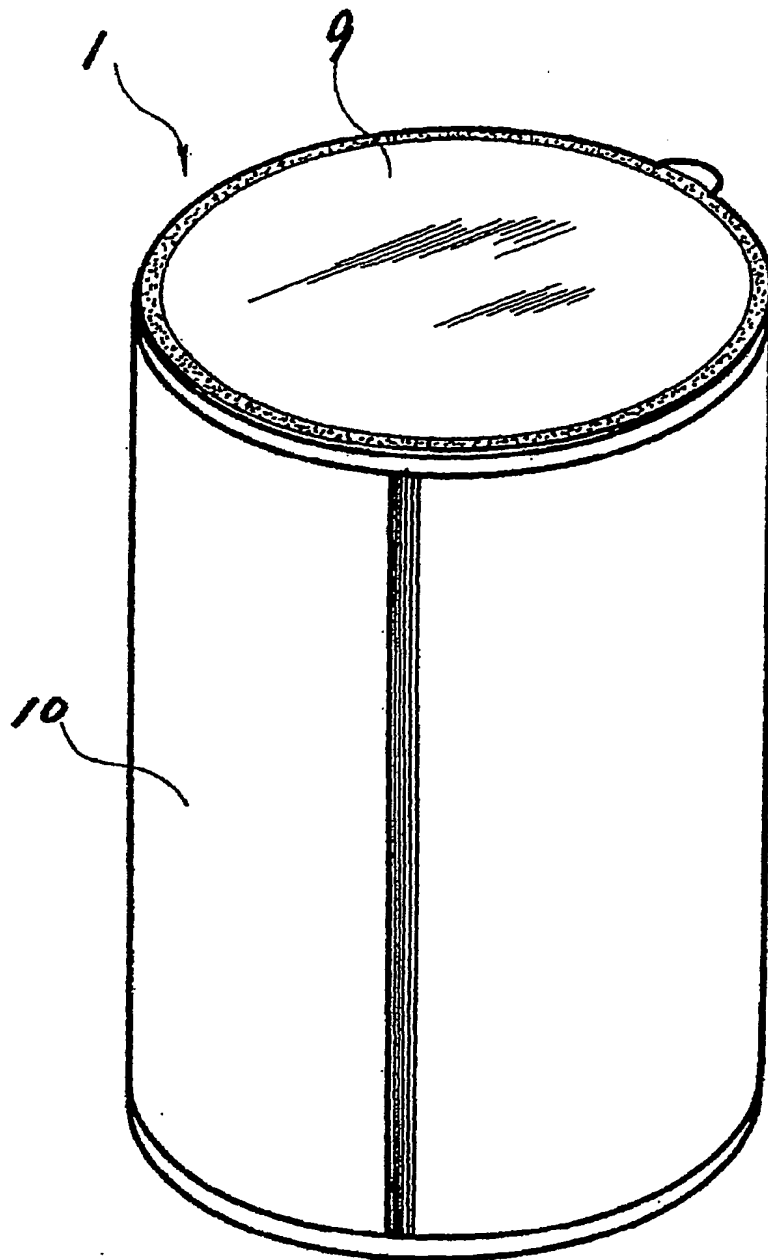
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【FIG 5】



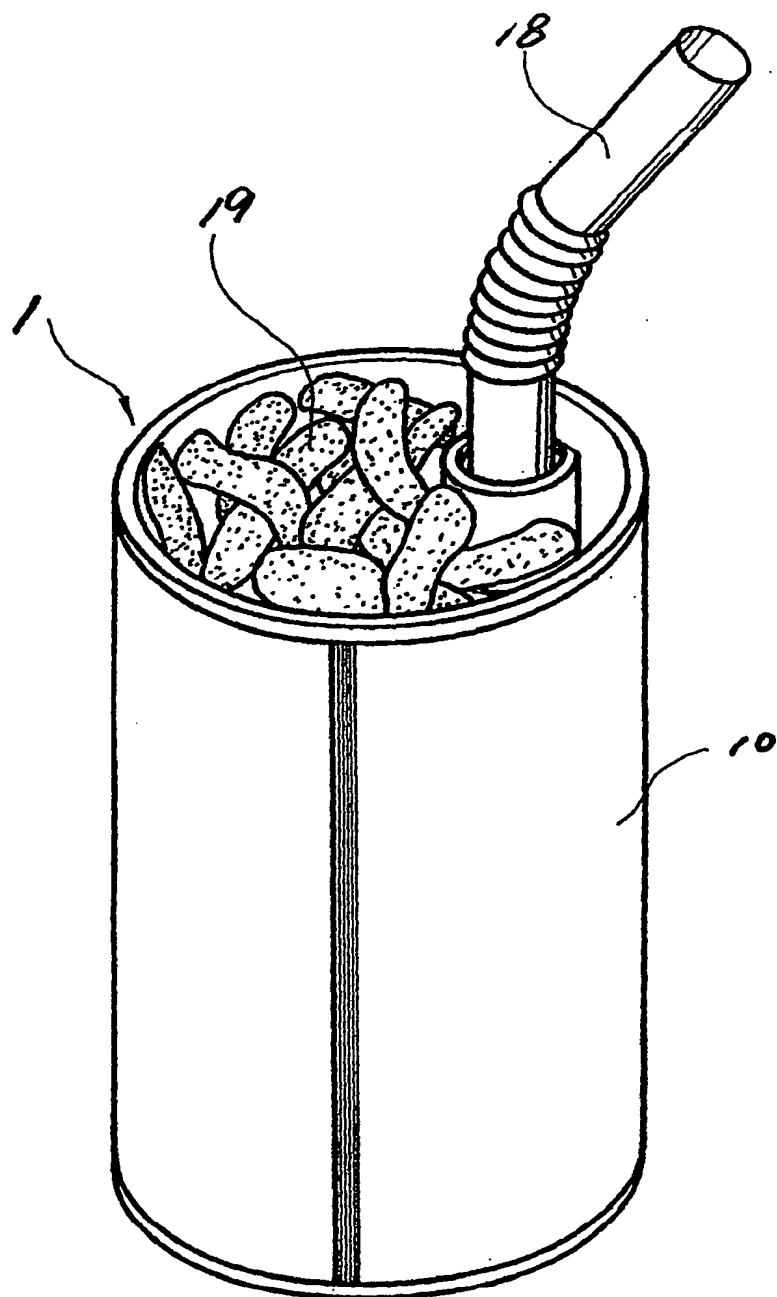
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【FIG 6】



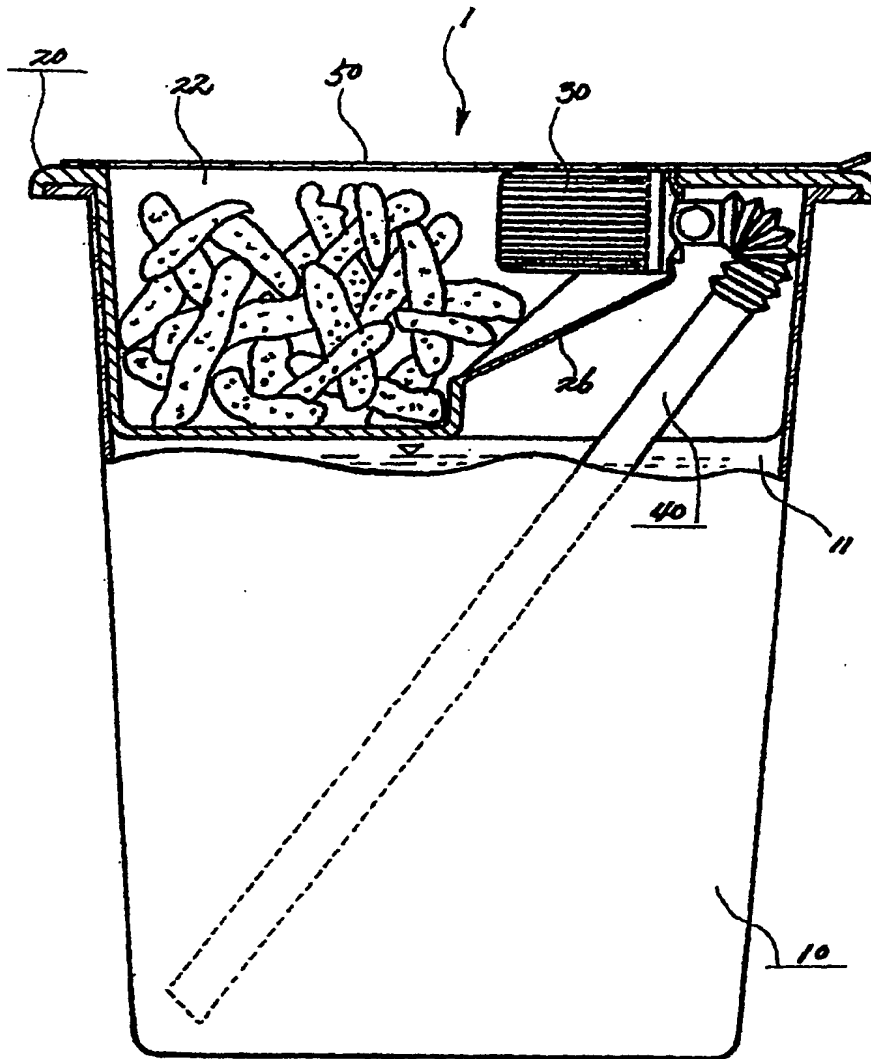
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【FIG 7】

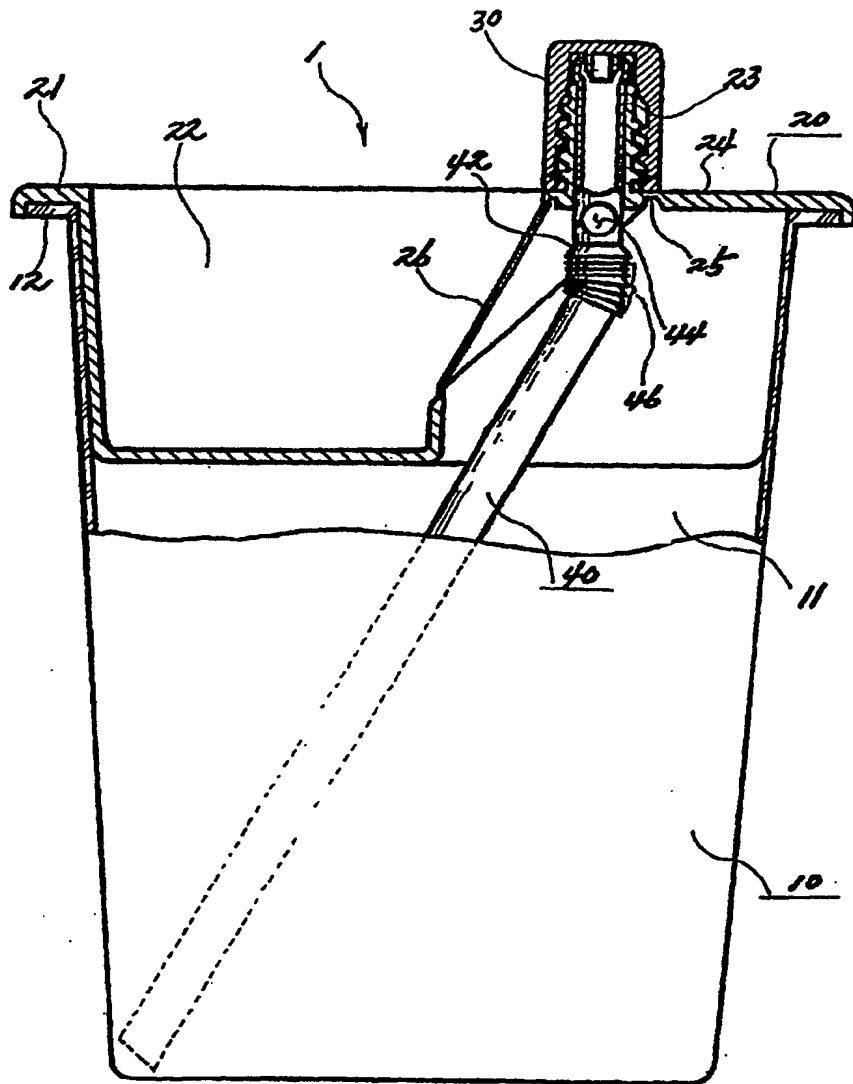


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【FIG 8】

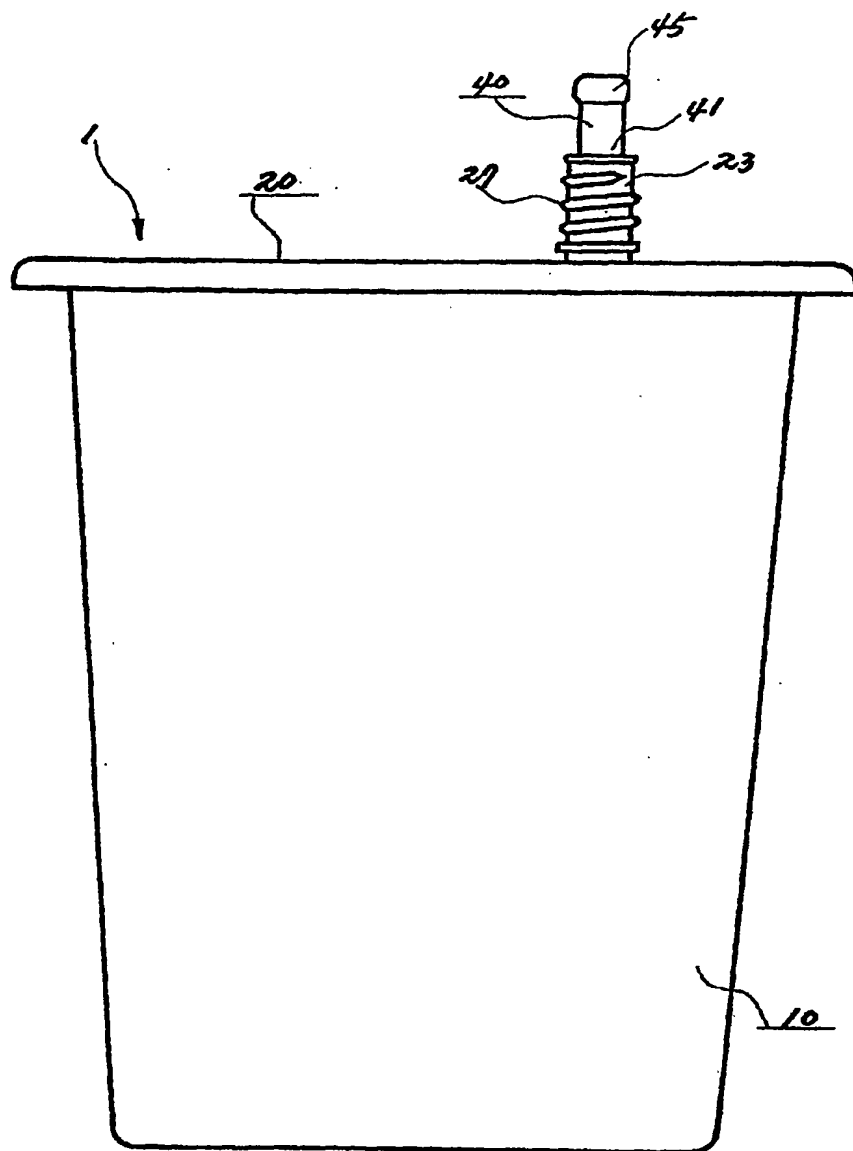


【FIG 9】



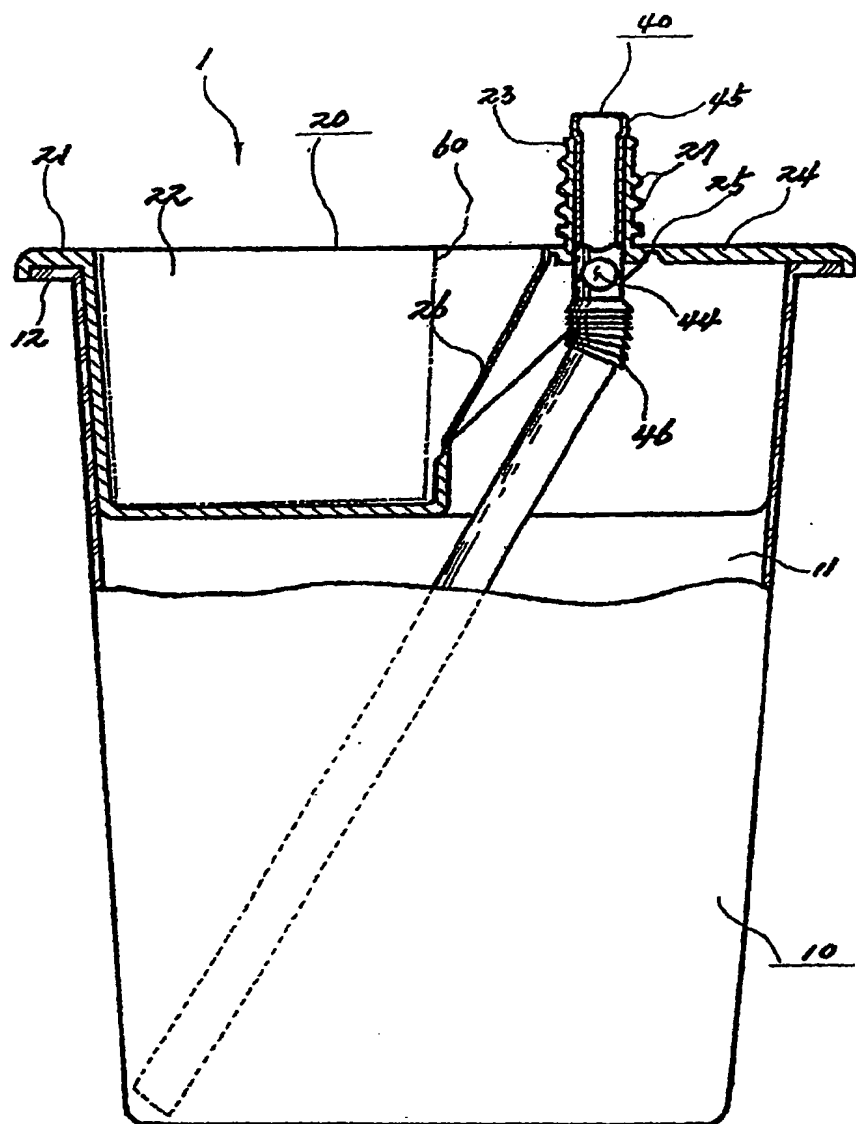
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【FIG 10】



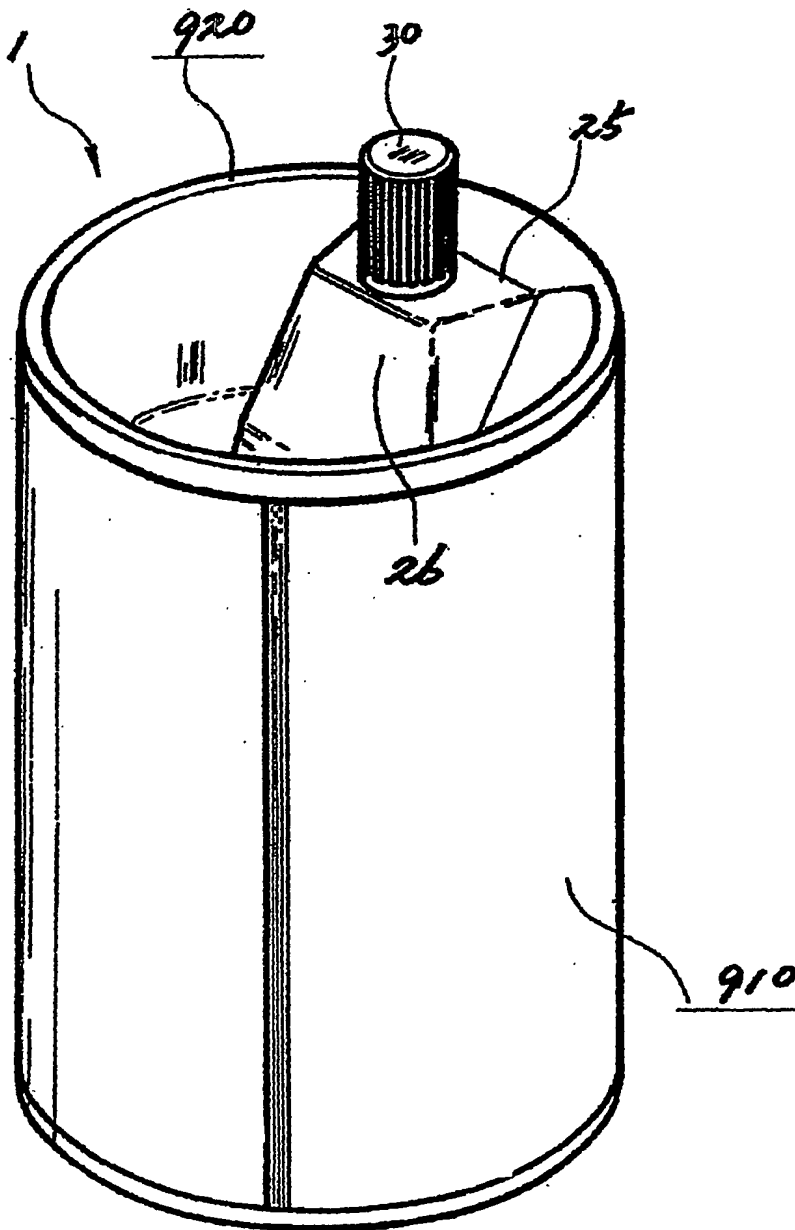
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【FIG 11】



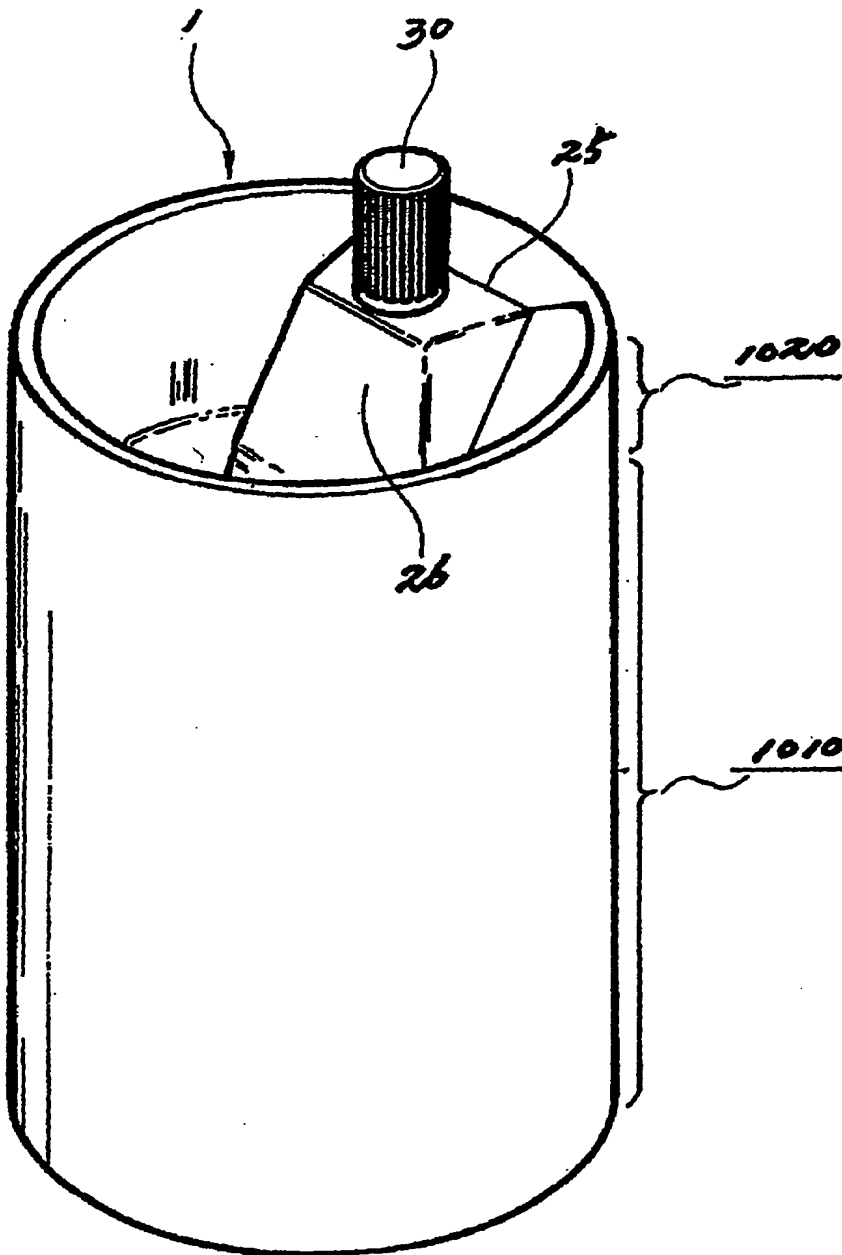
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【FIG 12】



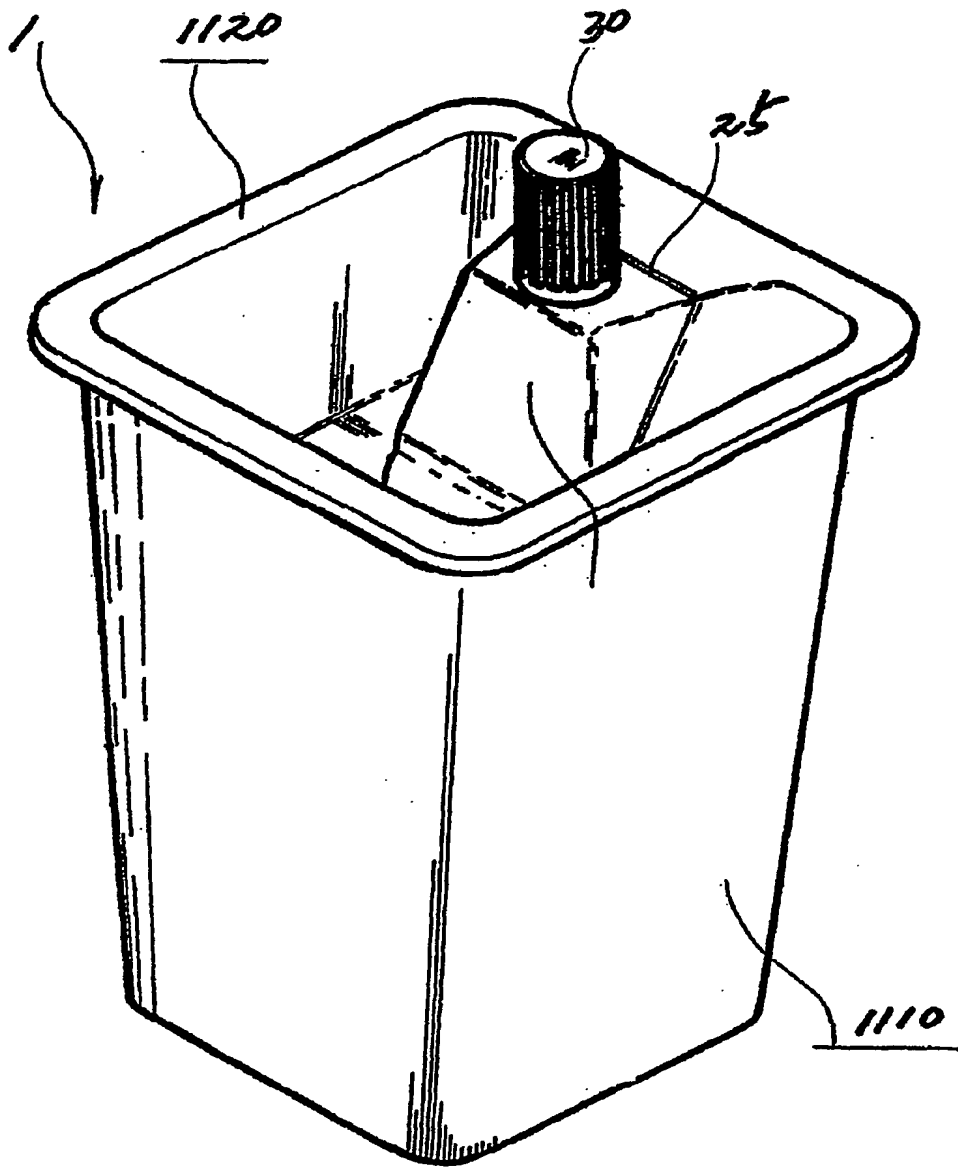
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【FIG 13】



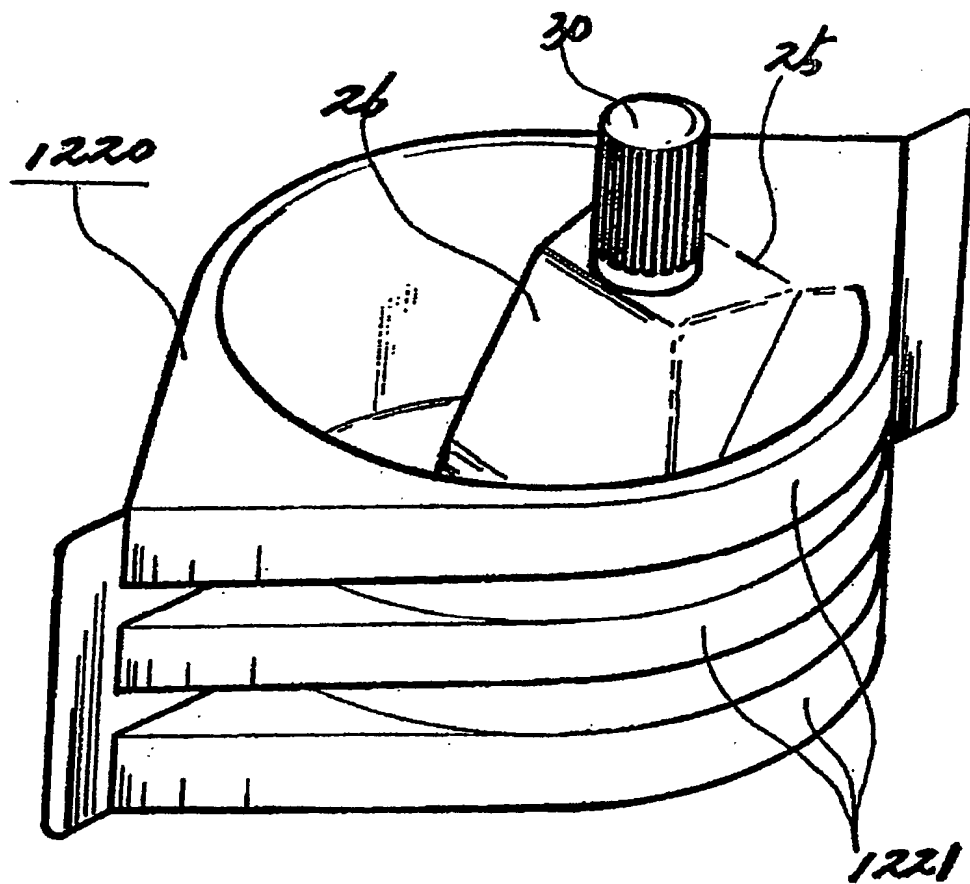
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【FIG. 14】



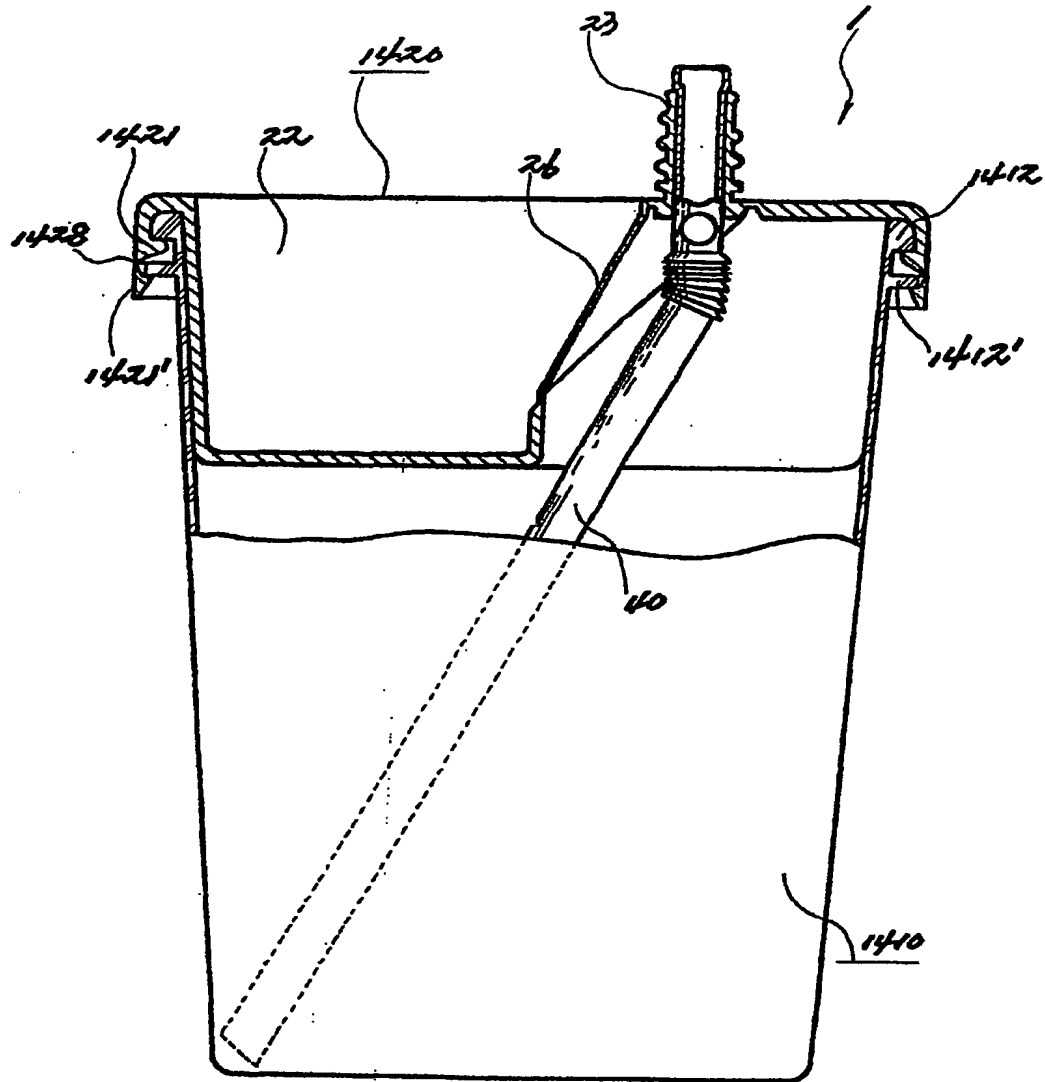
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【FIG 15】



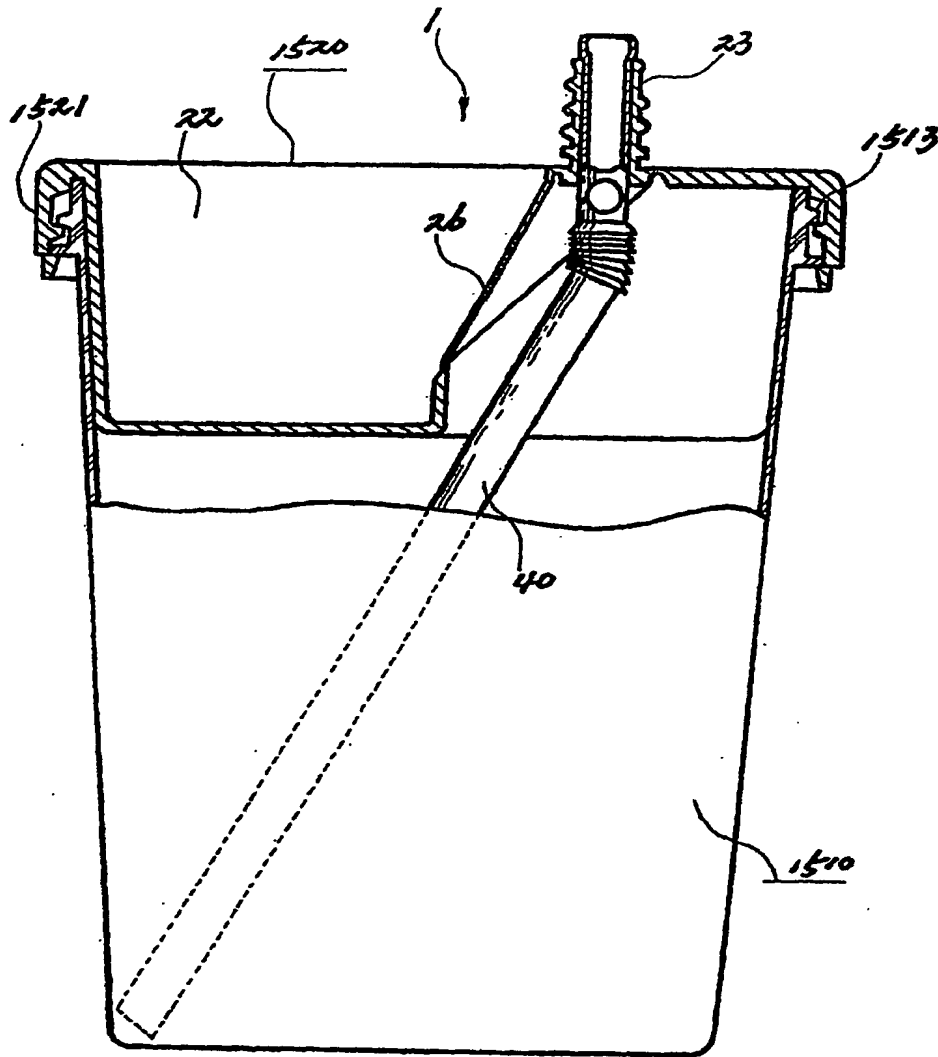
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【FIG 16】



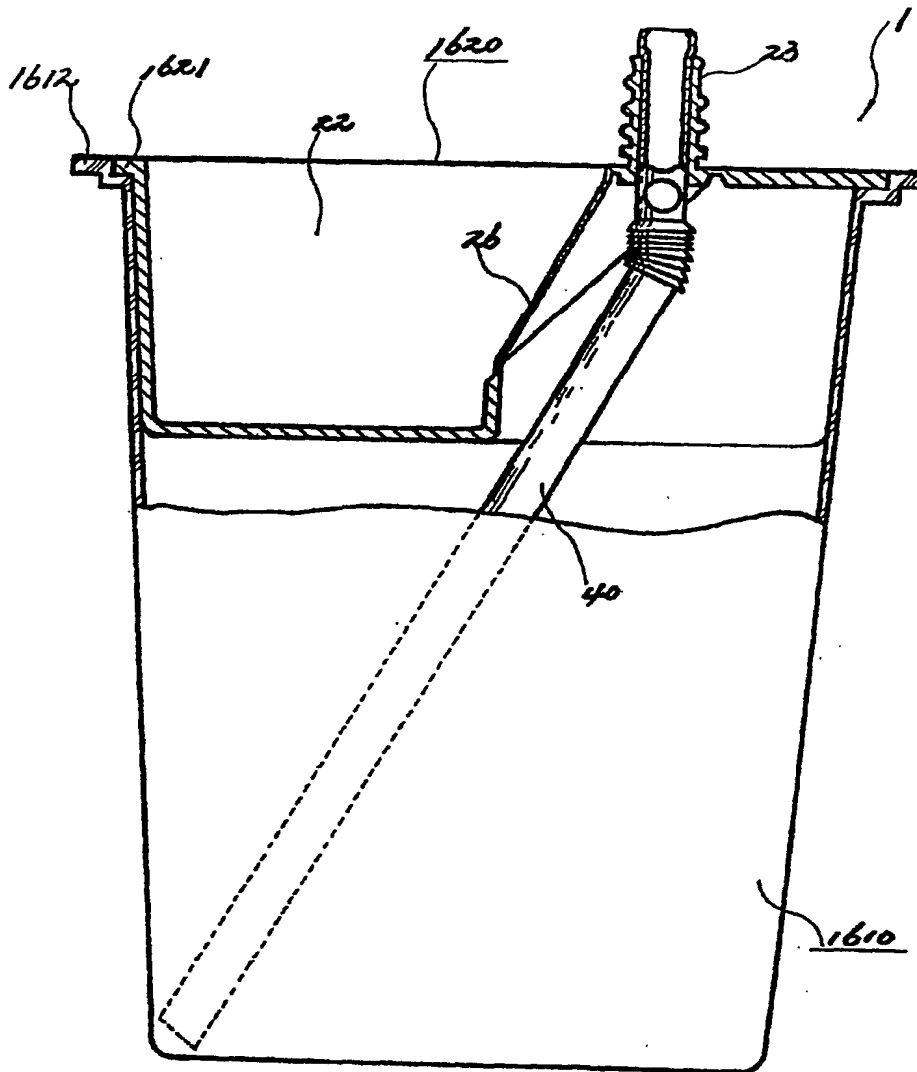
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【FIG 17】



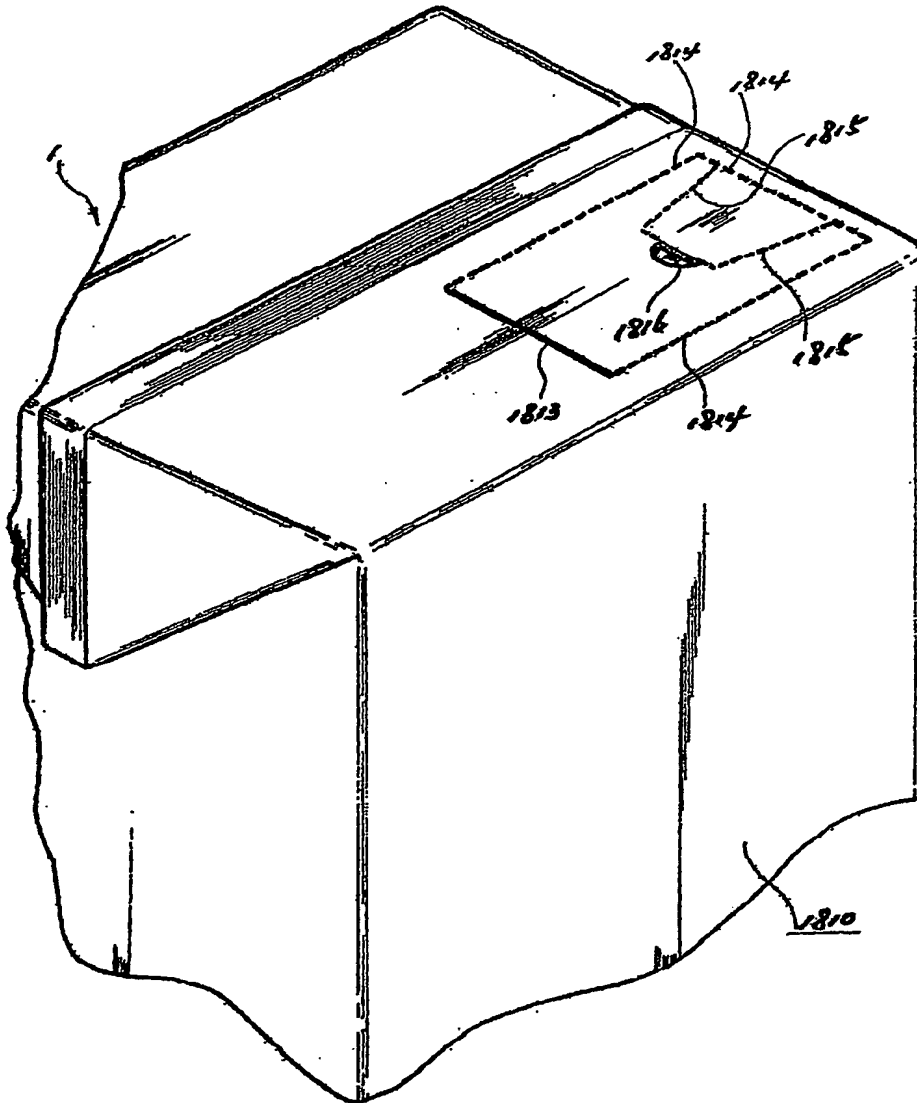
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【FIG 18】



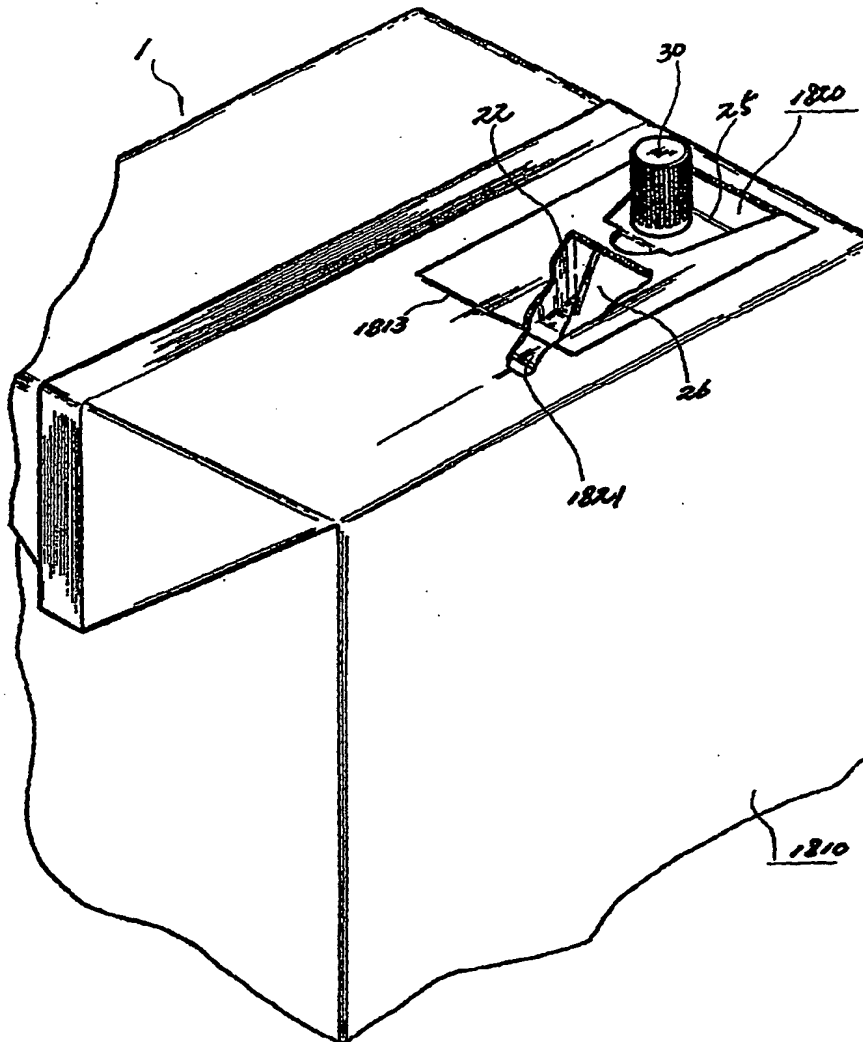
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【FIG 19】



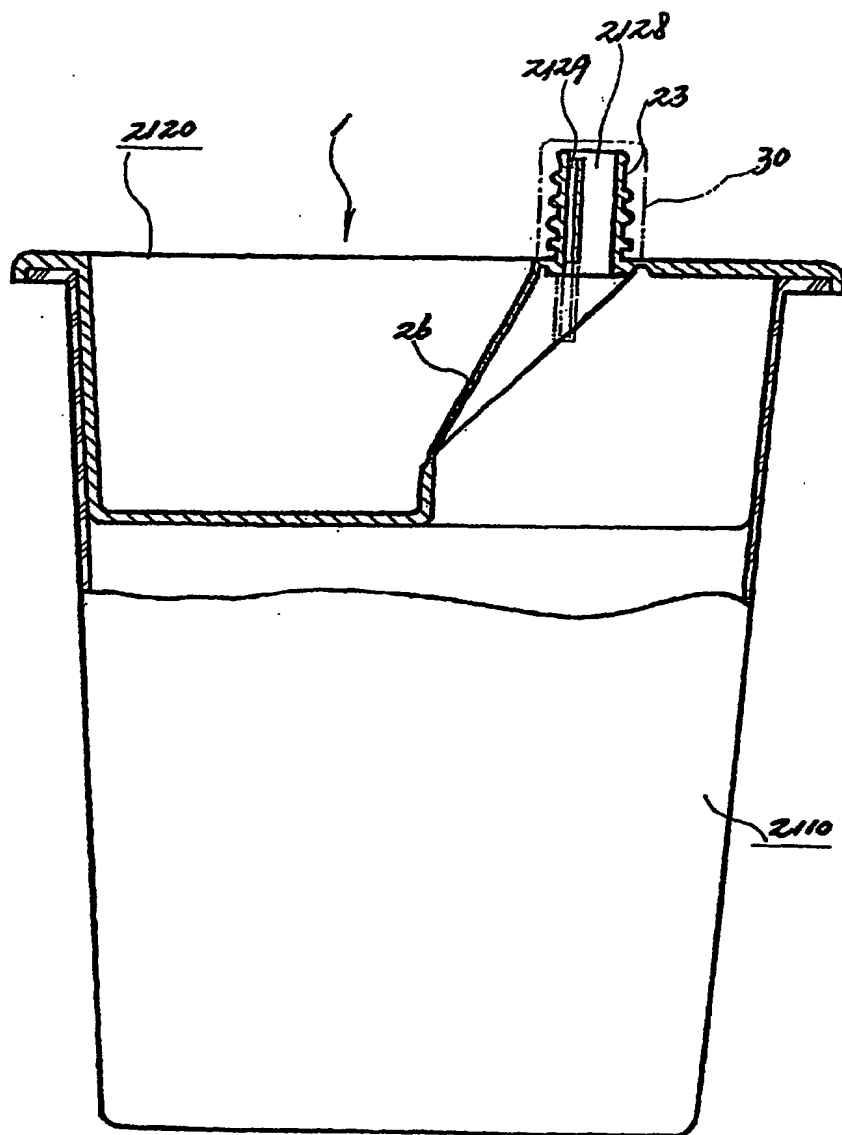
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【FIG. 20】



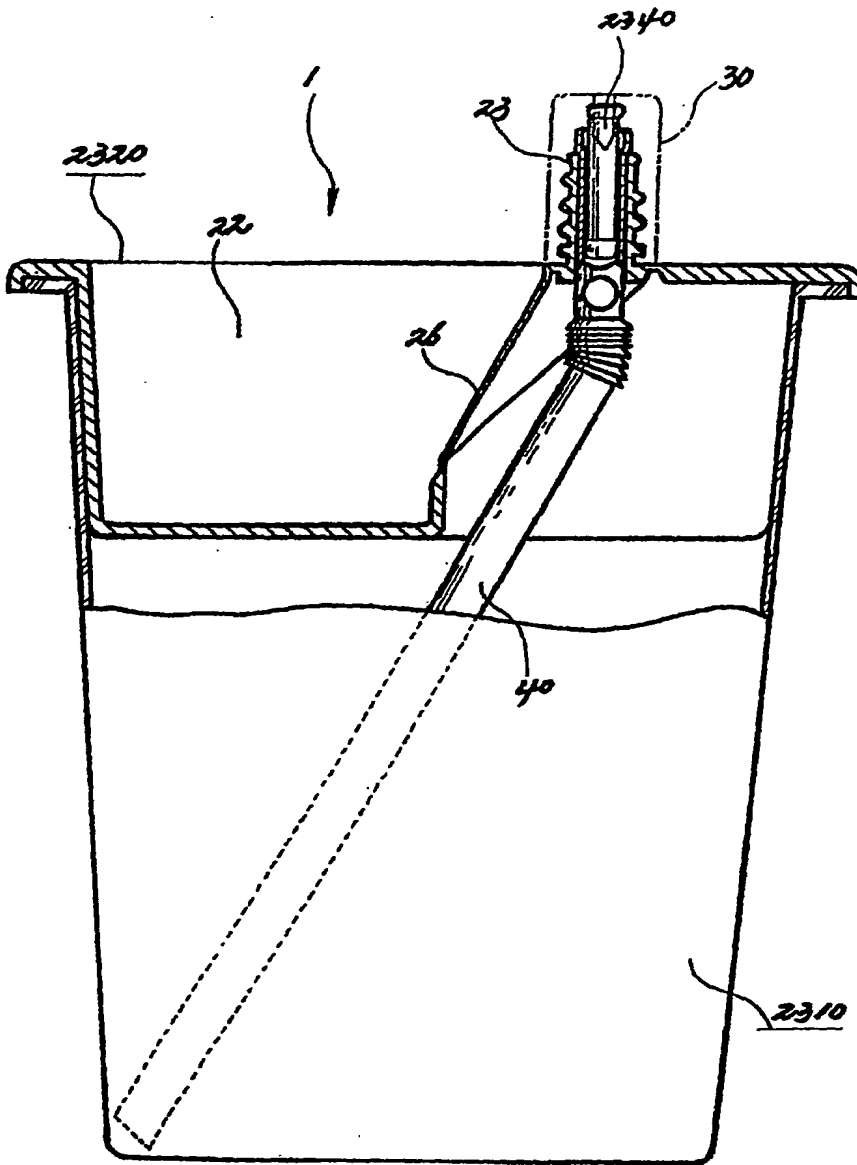
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【FIG 21】



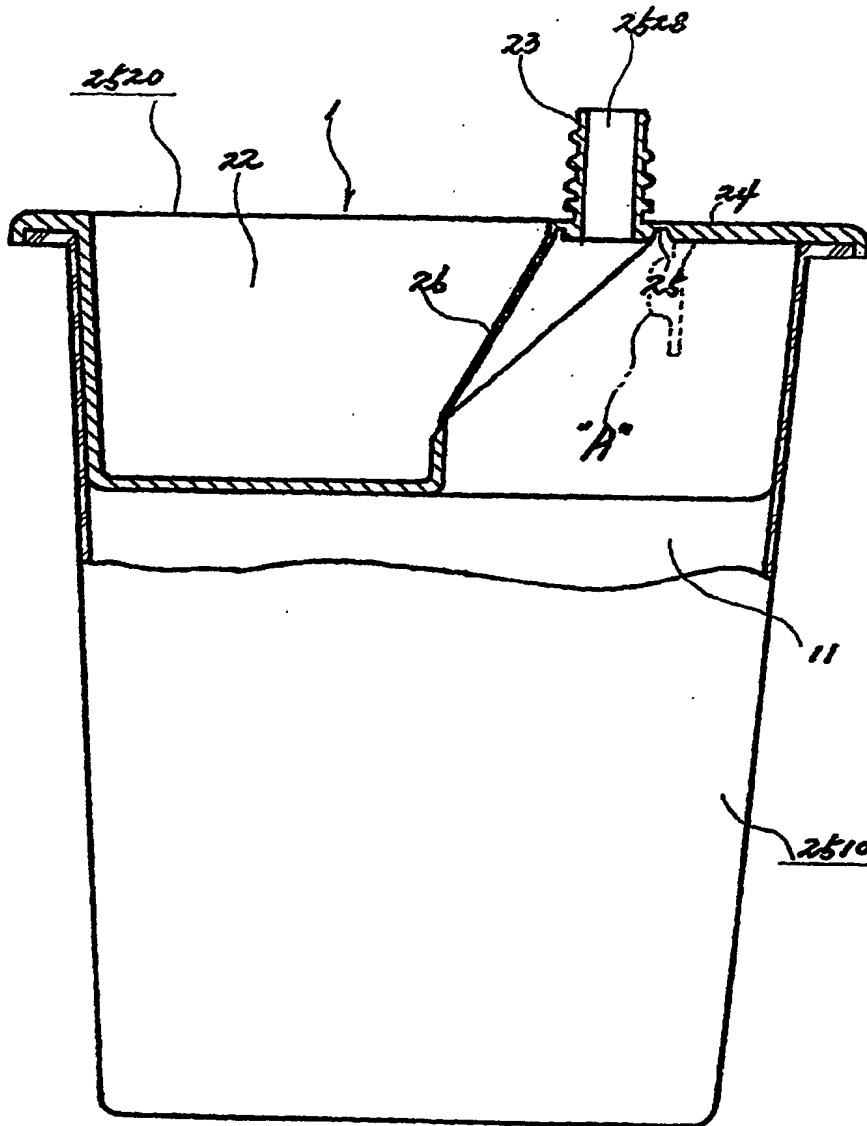
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【FIG 22】



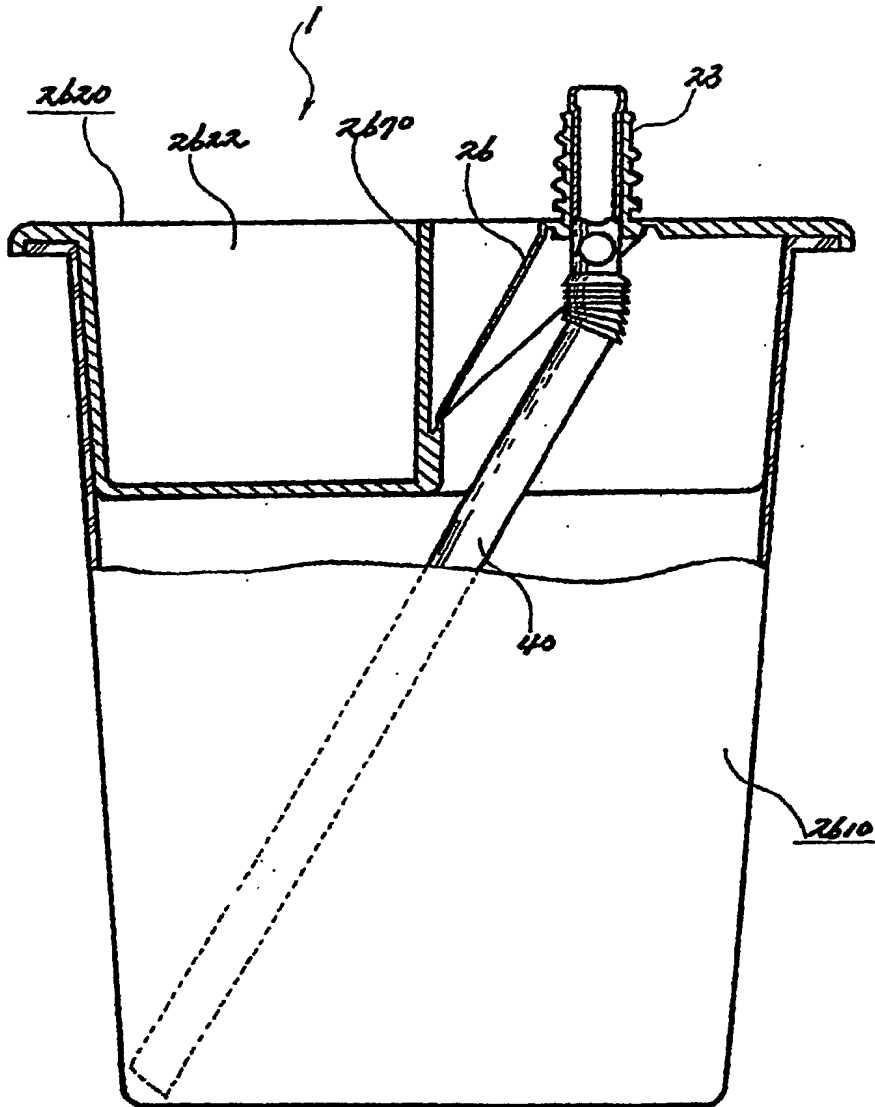
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【FIG 23】



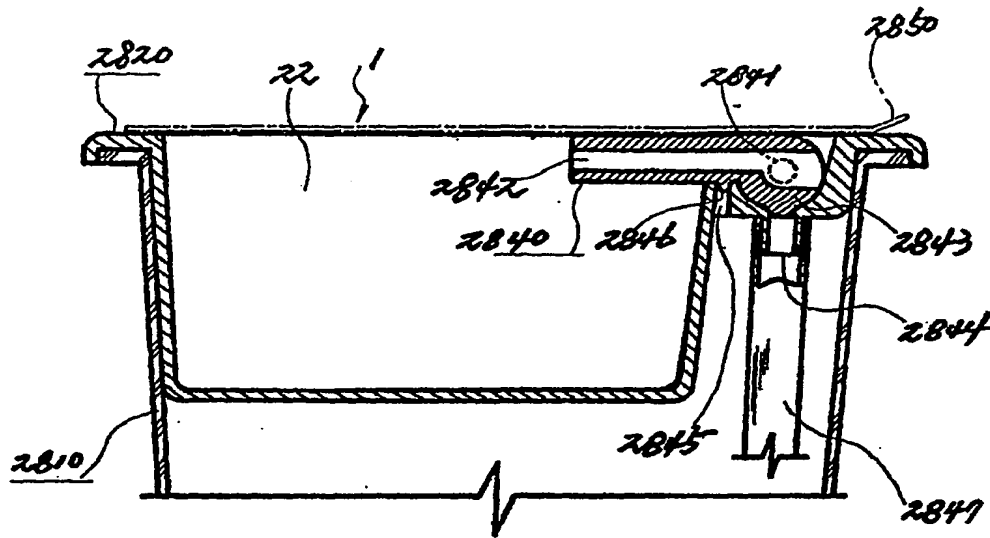
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**[FIG 24]**



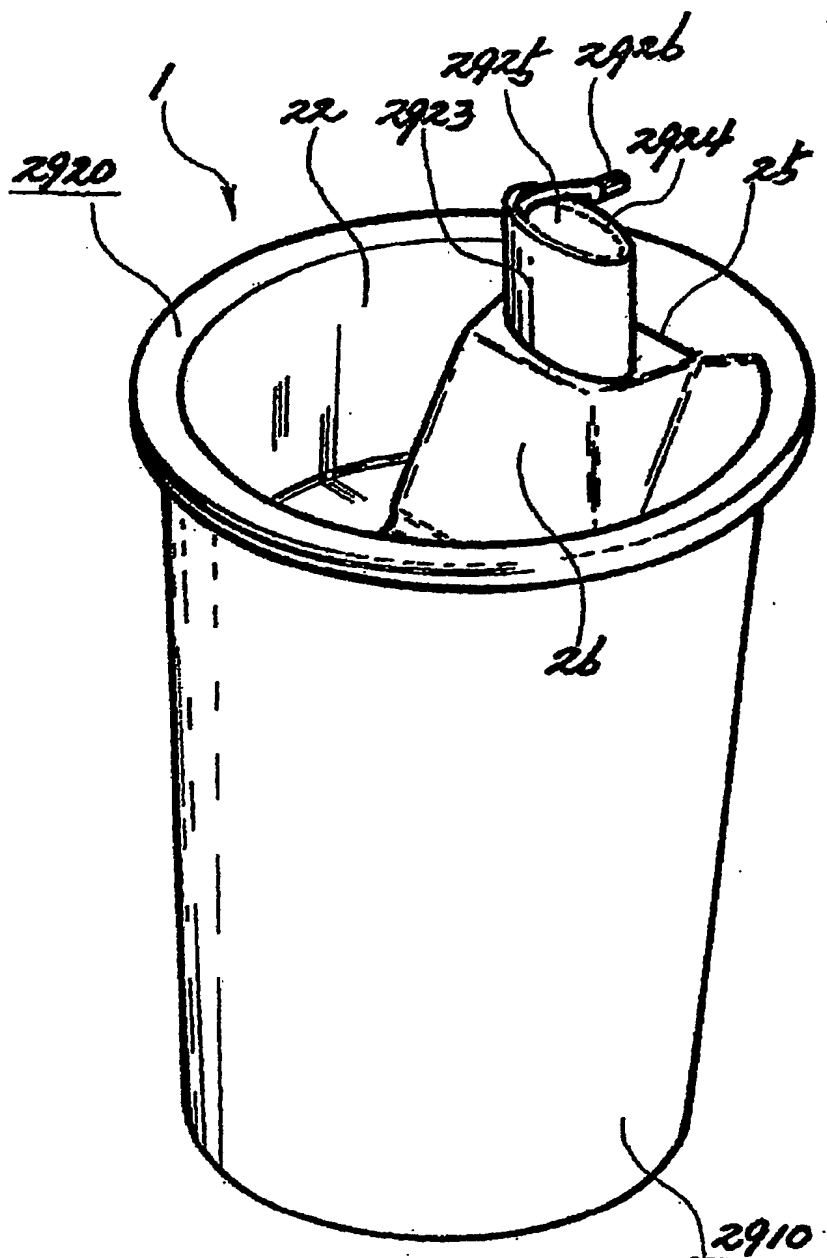
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【FIG 25】



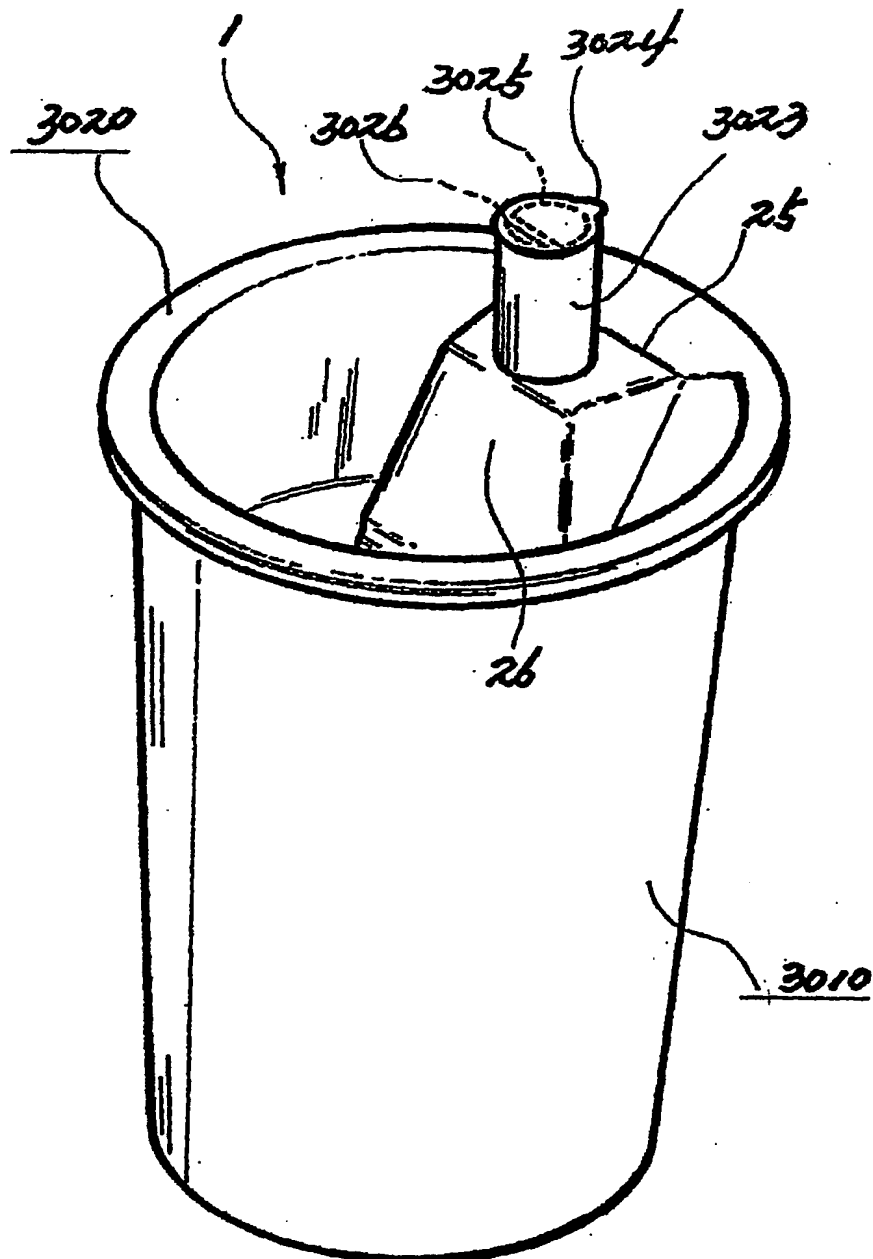
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【FIG 26】



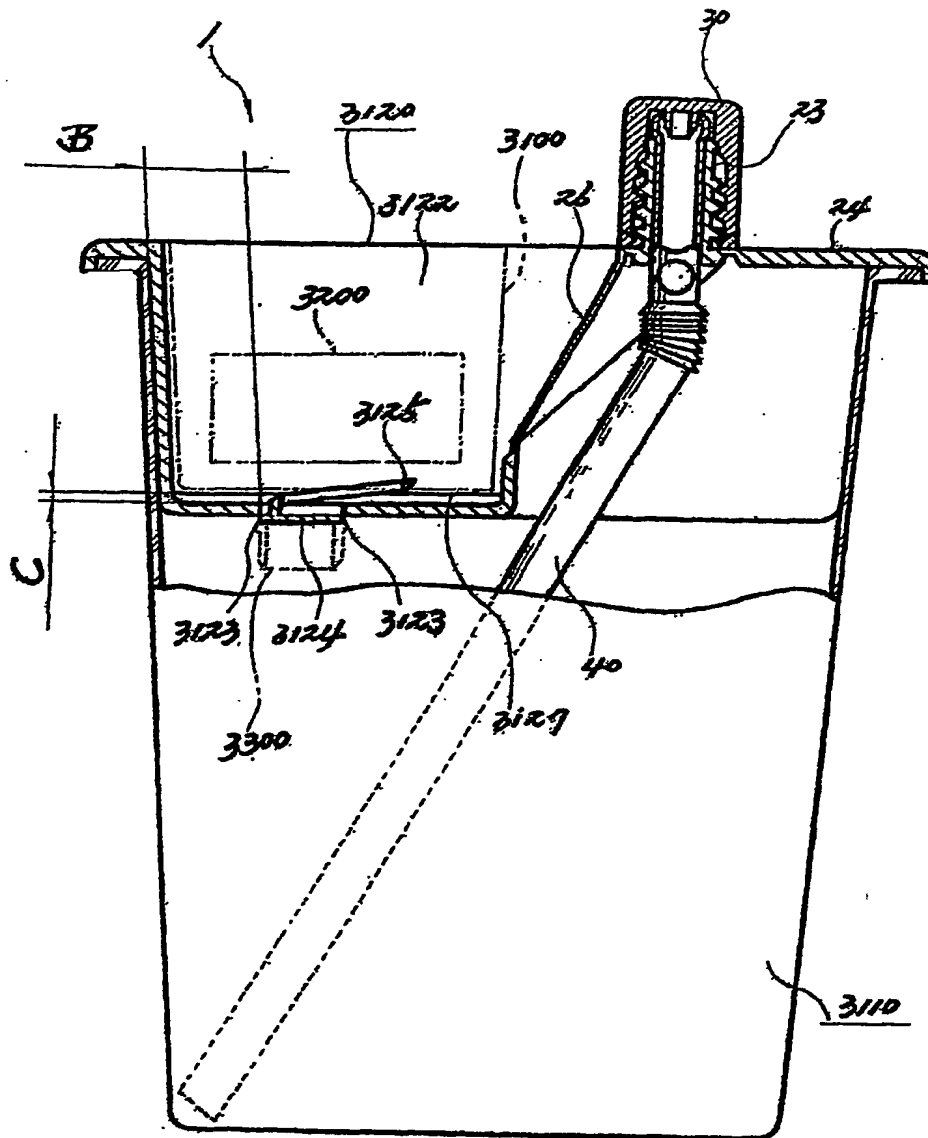
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【FIG 27】



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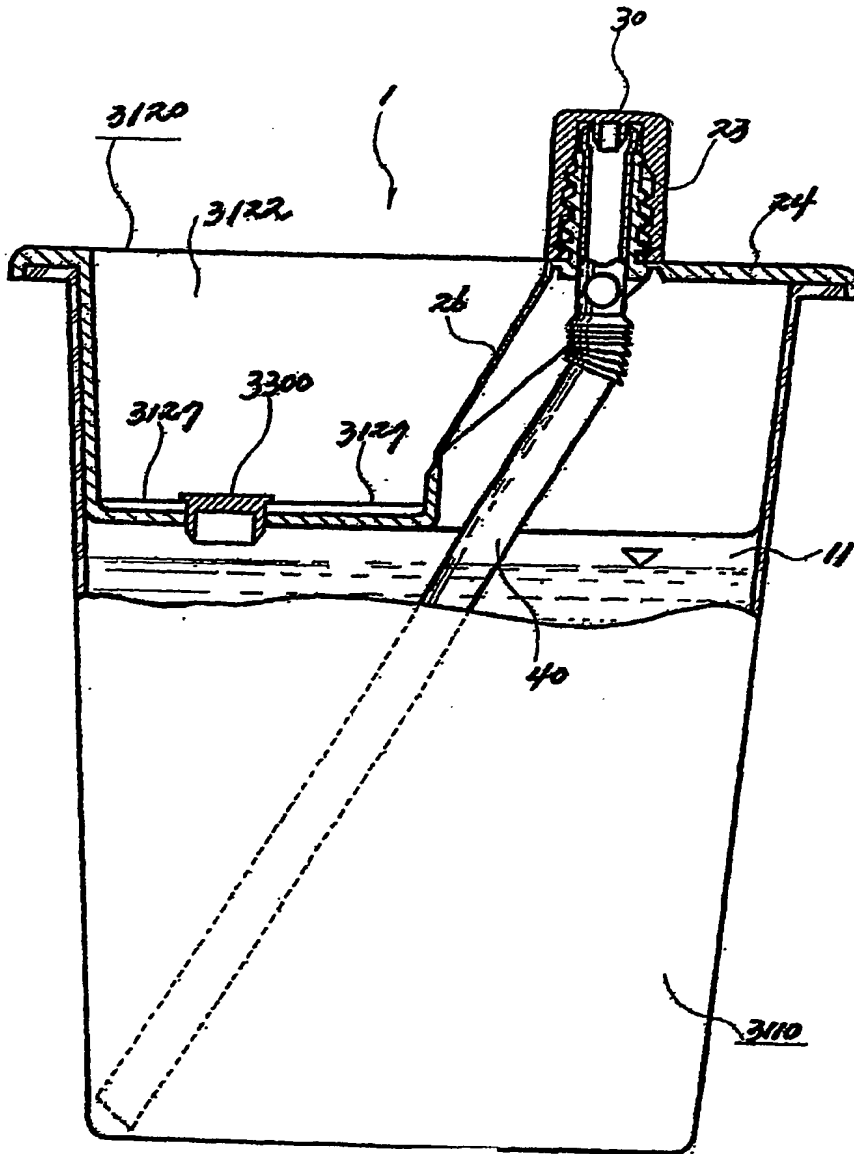
【FIG 28】





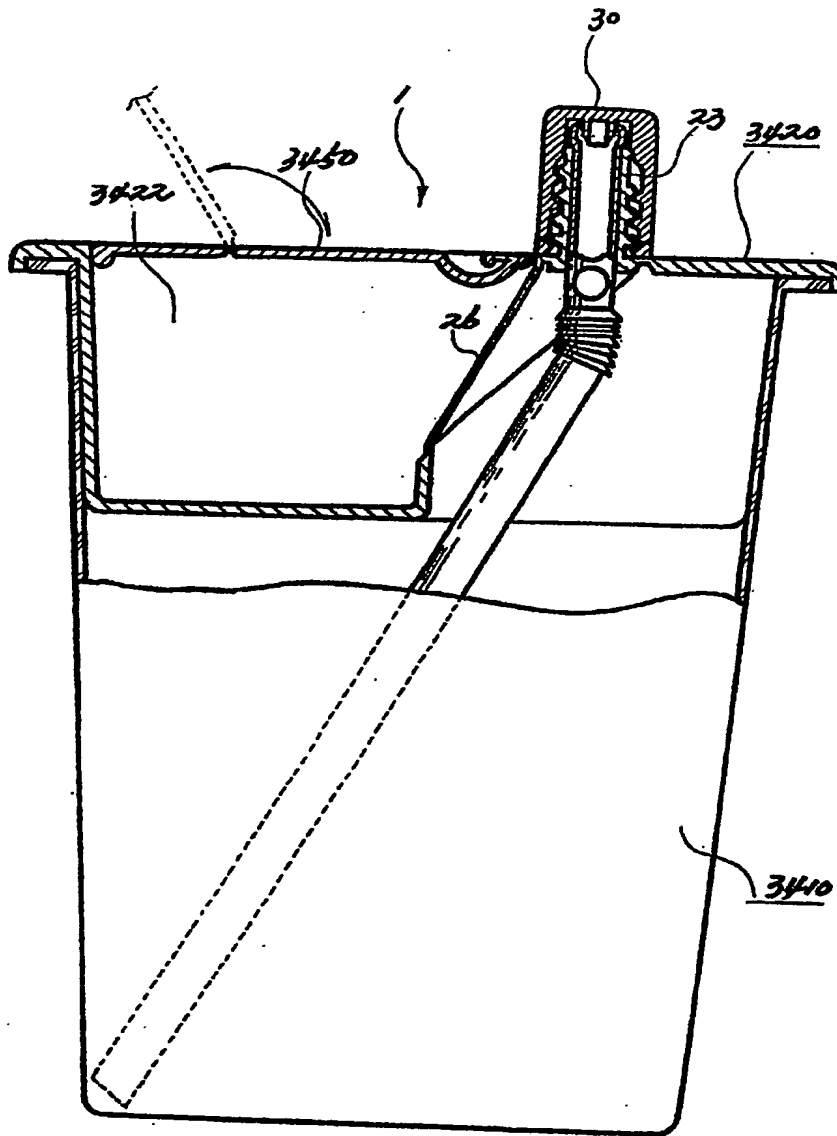
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【FIG 30】



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**[FIG 31]**



## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/KR2003/002618

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 B65D 51/28**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
KR, JP : IPC Classes as aboveElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
KIPO eKIPASS system**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages    | Relevant to claim No. |
|-----------|---|-----------------------|
| X<br>Y    | JP 62-008951 U ( HUKUYAMA PARU LTD ) 20 JANUARY 1987<br>(See claim 1 - 2, Fig. 1 - 2) | 1, 2, 4, 6, 12<br>3   |
| Y         | JP 63-062359 U (BUOKU GAGAKU LTD ) 25 APRIL 1988<br>(See the whole document)          | 3                     |
| A         | JP 63-055906 U (BUOKU GAGAKU LTD) 14 APRIL 1988<br>(See Fig. 2)                       | 8                     |
| A         | US 5,180,079 A (JOHN JENG) 19 JANUARY 1993<br>(See the whole document)                | 1, 4, 6               |
| A         | US 5,076,425 A (CLIFFORD PLONE) 31 DECEMBER 1991<br>(See the whole document)          | 1, 4, 6               |

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search

27 FEBRUARY 2004 (27.02.2004)

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

PCT/KR2003/002618

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---------------------|----------------------------|---------------------|
| JP 62-008951 U                            | 20.01.1987          | NONE                       |                     |
| JP 63-062359 U                            | 25.04.1988          | NONE                       |                     |
| JP 63-055906 U                            | 14.04.1988          | NONE                       |                     |
| US 5,180,079 A                            | 19.01.1993          | NONE                       |                     |
| US 5,076,425 A                            | 31.12.1991          | US 5,035,320 A             | 30.07.1991.         |